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UNIVERSITY OF ALBERTA

**VALIDITY OF THE ALBERTA ASSESSMENT AND PLACEMENT
INSTRUMENT (AAPI) FOR USE WITH ELDERLY
LONG TERM CARE CLIENTS ON HOME CARE**

by

LINDA JOAN LAZARUK



A thesis submitted to the Faculty of Graduate Studies and Research in partial
fulfilment of the requirements for the degree of **MASTER OF SCIENCE**.

DEPARTMENT OF OCCUPATIONAL THERAPY

EDMONTON, ALBERTA

SPRING, 1995



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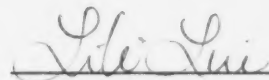
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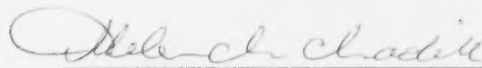
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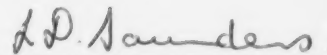
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Abstract

This retrospective study examined the validity of the Alberta Assessment and Placement Instrument (AAPI) for use with elderly home care clients. The assessments of 60 clients admitted to home care in 1992 were compared to those of 60 clients referred, but not admitted. The groups were compared on measures of perceived need and health status, cognitive function, psychosocial function, activities of daily living, and use of care providers. The groups differed only in medication management.

Follow-up results showed that the groups differed in their ability to stay in the community one year after initial AAPI assessment. Sixty-three percent of those admitted to home care were discharged and remained in the community. Ten percent of those admitted to home care were discharged to a long term care institution in comparison to none of those in the other group. Forty-two percent of those not initially admitted to home care were admitted one year later.

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Thank-you to my husband Roger, my family, and friends for their support as I challenged myself.

I dedicate this thesis to all the occupational therapists that work in home care, with acknowledgement and support in their belief of continued excellence in home care occupational therapy practice.

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CHAPTER 1

Introduction

In this introduction, **long term care** and **home care** are defined. The **Alberta Home Care Program** is introduced, followed by the **purpose** of the study.

Long term care is described as "an integrated mix of health, psychosocial support, and maintenance services provided on a prolonged basis, either continuously or intermittently to individuals whose functional capacities are chronically impaired or at risk of impairment. Care is provided in the least restrictive environment possible" (Alberta Government, 1988, p. 3). The objective of long term care, be it community-delivered or institutionally-delivered services, is to increase or maintain a client's level of functioning at his or her maximum potential in order to promote functional independence and improve quality of life (Alberta Government, 1988).

Home care has been described as the assessment, coordination, and provision of services to individuals or families in a home setting in order to improve their health and well-being (Health and Welfare Canada, 1986). This includes utilizing family resources, community health, and social services to enable clients to function as independently as possible within their own community (Health and Welfare Canada, 1986). The services may include nursing, social work, physical therapy, and occupational therapy, all of which are direct care within a client's

home. Support services such as homemaking, personal care and volunteer assistance are also available (Alberta Health, 1993b).

The mission of Alberta's home care program is "to assist Albertans to achieve and maintain health, well-being and personal independence while staying in their homes" (Alberta Health, 1992a, p. 1). The historical perspective of the Alberta Home Care Program dates back to 1976 (see Appendix A). The Public Health Act outlines eight main objectives for home care (see Appendix B). The belief principles, which philosophically guide the objectives, focus on client independence, client responsibility, family and community support, client autonomy and dignity. A home care client has the right to participate in their health care decisions, to accept or refuse services, to exercise a degree of control over the service arrangements, and to risk personal health or safety to retain independence (Alberta Health, 1991). The **Alberta Assessment and Placement Instrument (AAPI)**, created in 1989 by Alberta Health, fosters the belief principles of the home care program (Alberta Health, 1991) and serves to provide comprehensive evaluation, facilitate appropriate long term care placement, and facilitate the role of case management (McKenzie, Capuzzi, & Will, 1989).

Purpose of the Study

There are two purposes to this study both related to validity of the AAPI. The first purpose is to compare clients who are admitted and those who are not

admitted to home care based on the AAPI measures of perceived need and health status, cognitive function, psychosocial function, activities of daily living and the use of care providers. Demographics such as age, gender, marital status, living arrangement, type of residence, and diagnosis are also compared. The second purpose of this study is to determine the status and location of individuals in the admitted and not admitted groups one year after the initial AAPI assessment.

CHAPTER 2

Literature Review

This literature review has been divided into three sections. Part one reviews the demographics of aging. Part two provides a description of factors that are related to independent community living. Finally, part three is a description of the home care referral and the assessment process using the AAPI.

Part One: Demographics of Aging and Implications for Home Care and Institutional Care

In this section, **demographics on aging** are presented, as well as demographic information on those admitted to **home care** and those admitted to long term care **institutions**. Generally, the aged population is defined as individuals who are aged 65 years or older (Health and Welfare Canada, 1990, Seniors Advisory Council for Alberta, 1991).

Age

In 1986, there were 2,697,600 Canadians aged 65 years and older and seven percent or 191,325 were Albertans (Seniors Advisory Council for Alberta, 1991). By the year 2016, this population is expected to climb to 478,800 persons in

Alberta (Seniors Advisory Council for Alberta, 1991). It is projected that there will be approximately seven million people aged 65 years or older in Canada by the year 2031, and they will account for approximately 25% of Canada's population (Health and Welfare Canada, 1990).

The mean age reported in the literature of those utilizing home care ranged from 72 to 80 years of age (Esposito, 1992, Glick, 1994, Kempen & Suurmeijer, 1991). Although about 20% of the community dwelling elderly population need community long term care of some form (Magaziner & Cadigan, 1989), it is estimated that 79% of home care services are utilized by elderly persons over 75 years of age and that 25% of the home care clientele are over the age of 85 (Health and Welfare Canada, 1992b). As this elderly population increases, home care services will also need to increase to meet the long term care needs of people in this age group (Health and Welfare Canada, 1990, Kempen & Suurmeijer, 1991).

Dwyer, Barton, and Vogel (1994) found that the mean age of residents of institutional settings is 77 years old. As one ages, the risk of institutionalization becomes greater and after the age of 85 years of age, the risk is substantial (Hanley, Alecxih, Weiner, & Kennell, 1990, Stone & Fletcher, 1987).

Gender

The gender ratio (men per 100 women) is 75 for the total group over 65 years of age (Statistics Canada, 1991). It reaches a peak over the next five

consecutive years so that the gender ratio of those aged 65 to 69 years of age is 85. For individuals over the age of 70 years, the ratio decreases with increasing age so that at the age of 80 (or over) the ratio of men per 100 women is 57 (Statistics Canada, 1991).

Significantly more women use home health care than men (Glick, 1994, Kempen & Suurmeijer, 1991) and more women than men are also admitted to a long term care institution (Dwyer, et al., 1994).

Marital Status

Eighty-two percent of men between the ages of 65 and 69 years are married compared to only 53% of women in the same age category. At the age of 80 years or older, 68% of men are married while only 18% of women are married (Statistics Canada, 1991).

If we examine gender and widowhood according to age cohorts, for the age cohort of 70 to 74 years of age, the percentage of men for this age cohort that are widowed is estimated to be 10.8% while it is 44.1% for women of the same age cohort. For the age cohort of 75 to 79 years of age, which is the age cohort of most home care clients, the percentage of men that are widowed is 17.3% while it is 57.5% for women. For people aged 80 to 84 years of age, this rises to 27.7% in men and 70.2% in women. Looking at the age cohort of 90+ years of age, 55.5% of men are widowed and 84.7% of women are widowed (Martin

Matthews, 1987).

Living Arrangement

It is estimated that one third of all individuals over 65 years of age live alone (Glick, 1994). Those that live alone see themselves as no less healthy and no less able to perform their basic activities of daily living than their counterparts who live with someone (Magaziner & Cadigan, 1989). Stone and Fletcher (1987) suggest that there is a steady rise in the percentage of men and women who live alone but that between the ages of 60 to 80 years, there is a very sharp rise in the percentage of women who live alone compared to men.

More of those who utilize home care services tend to live alone in comparison to living with others (Glick, 1994, Kempen & Suurmeijer, 1991). Most individuals who are functionally impaired and over the age of 65 reside at home and receive most of their care from an informal support network (Dwyer, et al., 1994). While several authors found that individuals admitted to a nursing home lived alone prior to being admitted (Branch & Jette, 1982, Greene & Ondrich, 1984, Pearlman & Crowne, 1992), Dwyer, et al. (1994) found a relatively equal number of his sample of institutionalized individuals living alone (31%) and living with a spouse (34%) just prior to institutionalization.

Diagnosis

Women have a greater life expectancy than men and also have higher rates of non-fatal chronic conditions than men (Dwyer, et al., 1994). The most prevalent cause of death in men over the age of 65 years is heart disease, followed by malignant neoplasms, and respiratory disease. For women of this same age range, malignant neoplasms occurs more frequently, followed by heart disease and cerebrovascular disease (Simmons-Tropea & Osborn, 1987). The three most common health problems resulting in functional limitations identified by individuals over 65 years of age are arthritis, hypertension, and limb and joint disorders (Dwyer, et al, 1994).

While the most common conditions of those institutionalized are diabetes, stroke, and hypertension (Steinbach, 1992), Esposito (1992) found that the most common conditions of individuals on home care are cardiac, respiratory, glucose-related, and neurological and/or injury related problems. Similarly, Helberg (1994) found that those on home care had diagnoses of circulatory (30%), respiratory (13%) and musculoskeletal (11%) disorders. Likewise, Glick (1994) found that impaired mobility occurred in 72% of the home care sample studied, cardiovascular in 52%, and respiratory problems in 48% of individuals on home care. Glick (1994) also concluded that the more complex the problems, the increased reliance on home care.

Other Factors

Perceived health status has been found to be an important predictor for institutionalization (Shapiro & Tate, 1988, Hanley, et al. 1990). Similarly, Dwyer, et al. (1994) found that 60% of the institutionalized individuals in their study reported either fair or poor perceived health status, while the remainder rated their status as good or excellent.

Although some authors state that those with previous hospital admissions are more likely to be admitted to long term care institutionalization than those not previously admitted into long term care (Hanley, et al., 1990, Pearlman & Crown, 1992, Shapiro & Tate, 1988), others found that 93% of those institutionalized had no previous history of long term care institutional admission and 63% had no prior recent acute care admission (Dwyer, et al., 1994).

Summary of Demographics

The mean age of home care users ranges from 72 to 80 years of age (Esposito, 1992, Glick, 1994, Kempen & Suurmeijer, 1991) and that of institutionalized individuals is 77 years of age, on average (Dwyer, Barton, & Vogel, 1994). In both cases the majority of individuals are women (Glick, 1994). As women age, there is a high likelihood of widowhood (Martin Matthews, 1987) and the likelihood of them residing alone also increases (Stone & Fletcher, 1987). They also have a higher rate of non-fatal chronic conditions (Dwyer, et al., 1994) in

comparison to men.

Part Two: Factors Related to Independent Community Living

In the aged population, the literature highlights five factors related to independent community living: **perceived health and physical status, cognitive function, psychosocial function, activities of daily living (ADL) function and care providers** (Bernstein, 1992, Disler, Roy, & Smith, 1993, Helberg, 1993). A review of these factors is provided.

The three most significant factors that determine independent community living in older adults are perceived health status, medication management, and nutritional status (Bernstein, 1992, Branch, et al., 1981, Williamson & Chopin, 1980).

Perceived Health Status

It has been assumed that regular assessment of the functional abilities of elderly people living at home would prevent further health deterioration and decrease the use of health services (Van Rossum, et al, 1993). Branch et al. (1981) and more recently, Van Rossum (1993) found that individuals who perceived their health status to be poor were greater users of home visits and benefited more from preventative home nursing visits than those with a better perceived health status.

In a prospective study, Weinberger et al. (1986) found that self-rated health status was a successful predictor for admission to institutional placement among a group of community residing older adults. Also, subjects who perceived their health status to be poor were found to have 3.5 times the risk of being deceased within three years when compared to those who perceived their health status to be good (Van Rossum, 1993).

Significant associations were found between the size of social network (including friends and relatives), health status, and perceived loneliness when determining factors related to perceived health status (Cox, Spiro & Sullivan, 1988).

Use of Medication

In examining medication management among community long term care clients, two of the most commonly reported problems that interfered with everyday functioning were drug interactions and medication side effects (Bernstein, 1992, Sidel, et al., 1990, Williamson & Chopin, 1980). Also, over-the-counter medications were often not reported and have significant impact on an individual's functioning (Bernstein, 1992). The most commonly used over-the-counter medications were oral analgesics, and cough or cold medications; only 12% of the older individuals studied by Lamy (1989) consulted their physician prior to the use of these medications.

Older adults had higher rates of medication consumption than the younger adult (Ostrom, Hammerlund, Christensen, Plein, & Kethley, 1985, Sidel, et al., 1990). They also ingested a higher dosage than prescribed (Lammy, 1989). In a study of older adults aged 65 to 99 years of age, Conn (1991) found that subjects consumed nearly twice as many over-the-counter substances as prescriptive medications. Younger subjects in the study reported usage of a larger number of over-the-counter medication types and those that were socially isolated, regardless of age, used more over-the-counter medications.

In a study by Ostrom et al. (1985), 75% of a group of independent older community residents used prescription drugs regularly, and 82% used over-the-counter drugs regularly. This high rate of medication consumption may be related to changes in physical and physiological status such as circulation, physical limitations that affect functional capacity as well as greater prevalence of chronic conditions (Ostrom, et al., 1985, Williamson & Chopin, 1980). Eighty-five percent of adults aged 65 years or older have at least one chronic disease and most chronic diseases depend upon medication for long term management (Ostrom, et al., 1985, Weintraub, 1990). The complexity of their medication regime, which is directly related to the complexity of their chronic conditions, places the older individual at greater risk for additional problems (Weintraub, 1990). Side effects of medications may also decrease appetite and, thus, affect the nutritional status (Bernstein, 1992). Older adults also have a greater sensitivity to medications (Esposito, 1992,

Weintraub, 1990). A survey of medication awareness among home care and non-home care users revealed approximately two-thirds of the total population lacked knowledge about their medications, including the reason for taking the medication, the dosage, side effects and contraindications. Even though this study used a relatively small sample of 32 subjects in each group, both home care and non-home care users were at equal risk for medication error, including both over and under dosage (Esposito, 1992). Drug interactions increased with the number of medications (Williamson & Chopin, 1981) and an older adult's ability to maintain independent living in the community may be directly dependent on the appropriate use of medications (Ostrom, et al., 1985).

Cooper, Love, and Raffoul (1982) found that in older adults, self-management of medications was an important determinant of health outcomes for those with a chronic illness. This included preparing and administering the medication without help. It was also found that the more fragmented the health care, the higher the chance of medication misuse (Cooper, et al., 1982).

The process of aging may alter medication compliance on a functional level. For example, if people have hearing or visual deficits, they may have difficulty comprehending the directions for medication usage. If people have a memory deficit, they may be more likely to over or under dose. If people have physical limitations such as arthritis, they may not be able to open the medication bottles or break the seal tabs (Esposito, 1992).

Nutrition

Nutrition should be included in the assessment of functional status of the elderly population because poor nutrition is often a sign of other problems (Bernstein, 1992). Further, good nutrition adds to a client's sense of well-being and has a positive effect on functional ability (Bernstein, 1992). In examining the factors that correlate with positive self-perceived health, Horgan (1987) found that those individuals who rated their health as excellent or good, ate appropriately and were within 5% of their desirable weight.

Cognitive Function

Dellasega and Stricklin (1993) found that while only 15% of their study sample of elderly home care individuals had a diagnosis of cognitive impairment, 61% had moderate to severe cognitive impairment when measured using the minimal status exam (Folstein, Folstein, & McHugh, 1975). Memory loss needs to be considered when planning any intervention program and should be part the functional assessment (Bernstein, 1992). Confusional states impact everyday functioning (Bernstein, 1992) and added supervision and prompting may be required by care providers for those clients with a dementia (Spector, 1991). In addition, Spector (1991) suggests that a cognitive assessment be included in eligibility criteria for community long term care. For example, a client with

Alzheimer's disease or a related dementia may not have limitations in activities of daily living but could have limitations that require supervision and prompting. Limitations would sufficient to be excluded from community care if activities of daily living were the sole criterion for admission (Spector, 1991).

Worall and Moulton (1993) found that the majority of severely demented individuals are institutionalized, but moderately demented individuals are not. These authors also found that mental disorientation in elderly individuals is a good predictor of subsequent institutionalization (Worall & Moulton, 1993). Delirium, a temporary alteration in cognition, may also be present in individuals who have been discharged from acute care and this could be directly related to reaction to anaesthetics or medications taken while in hospital (Dellasega & Stricklin, 1993).

Psychosocial Function

Assessment of psychosocial function of a community long term care client is essential (Albrecht, 1991, Bernstein, 1992, Spector, 1991) to establish client need and services to meet those needs. Spector (1991) identified that disruptive behaviour-related criteria should be included in admission eligibility criteria for community long term care and that the cognitively impaired individual receiving help from a spouse is more likely to receive help from additional care providers than those that are cognitively intact.

Depression is common in the elderly population living at home and is often

overlooked (Bernstein, 1992). Kempen and Suurmeijer (1991) compared a group of 52 individuals receiving home care to a demographically matched group of those who were not and found that there was no significant difference between the groups when measured by the Self-rating Depression Scale and the Loneliness Scale. Even though women report depressive symptoms more often than men, 90% do not report symptoms of anxiety or depression (D'Arcy, 1987). In a study by Kerkstra and Vorst-Thijssen (1991), individuals identified as most likely to receive home nursing care were men suffering from multiple physical disorders with psychosocial problems.

Wandering and agitation have been identified as behaviours that lead to institutionalization of older persons (Bernstein, 1992). In a study which examined one's ability to cope with illness, Helberg (1993) found that individuals with better coping abilities were more likely to manage independently after discharge from community long term care and were also less likely to be institutionalized. Coping includes the ability to carry out technical procedures related to care, and knowledge of one's health problems which allows one to monitor signs and symptoms of a disease or to utilize community resources appropriately (Choi, Josten, & Christiansen, 1983). Life events that may be viewed as a source of stress depend upon the individual's coping style; the stability of individual's social support network may be a key component to the success of coping (Bloom, 1990).

Activities of Daily Living (ADL) Function

Evaluation of activities of daily living has received considerable support as a method of measuring the severity of disability, therapy outcomes, and eligibility criteria to community long term care (Bernstein, 1992, Duffy & MacDonald, 1990, Eakin, 1989, Edwardson & Nardone, 1990, Frederiks, Wierik, Visser, & Sturmans, 1991, Spector, 1992). This can be implemented as part of routine contact, should be simple to perform and should evaluate function (Bernstein, 1992).

Activities of daily living (ADL) can be divided into basic activities of daily living and instrumental activities of daily living. Basic activities of daily living (BADL) are concerned with primary functions such as eating, bathing, dressing, toileting, and moving (McDowell & Newell, 1989). Instrumental activities of daily living (IADL) are those that enable an individual to live independently within the community and include shopping, cooking, managing money, and taking medications (McDowell & Newell, 1989). Some studies examine IADL and BADL separately (Bernstein, 1992, Frederiks, et al., 1991, Helberg, 1993) and others look at both concurrently (Disler, et al., 1993, Granger, 1993, Saba & Zuckerman, 1992).

Basic ADL are commonly assessed using tools such as the Kenny Self-Care Assessment Scale (Iversen, Silberberg, Stever, & Schoening, 1973), the Barthel Index (Mahoney & Barthel, 1965), the Katz Index of Independence in Activities of Daily Living (Katz, & Akpom, 1976), the Functional Independence Measure

(Granger, 1993), the Dependency at Discharge Instrument (Edwardson & Nardone, 1990), and the Whiting and Lincoln ADL Assessment for Stroke Patients (Eakin, 1989).

Scales that combine both basic and instrumental activities of daily living have also been used (Bernstein, 1992, Frederiks, et al., 1991, Helberg, 1993, Saba & Zuckerman, 1992). The Older American Resources Survey examines the status of community long term care clients (Helberg, 1993). The Home Health Care Classification Instrument (Bernstein, 1992, Saba & Zuckerman, 1992) includes nine significant items of functional assessment of older adults. These are bathing, dressing, toileting, transfers, continence, feeding, walking, using the telephone, and medication management (Bernstein, 1992, Saba & Zuckerman, 1992).

A functional assessment was created by Frederiks et al. (1991) to establish an inventory of functional performance to assist community nursing staff in direction of care. The assessment was applied to older individuals living at home. Based on the results of their study, the authors recommend the following items of basic activities of daily living be used: rising from a bed, dressing, using a toilet, eating, getting seated, and moving within the house. They recommended the following instrumental activities of daily living items be used: preparing a light meal, making a bed, dusting, mopping, shopping, laundering, and cooking. The authors stated that the combined areas of BADL and IADL provided pertinent information regarding the older individual's qualitative and quantitative needs for

assistance, allocation and type of care (Frederiks, et al., 1991). In addition, Bernstein (1992) indicated that both basic activities of daily living (such as bathing, transfers from bed to chair, dressing, toileting, feeding, and walking) and instrumental activities of daily living (such as getting about in the community, shopping, doing light housework, preparing meals, handling money and using the telephone) must be considered for a successful functional assessment.

Helberg (1993) looked at the relationship of independence in ADL to the rate of institutionalization or admission to community long term care. Using a sample of older individuals admitted to home care, assessment of basic activities of daily living (eating dressing, managing appearance, walking, toileting, and getting in and out of bed) and instrumental activities of daily living (phoning, travelling alone, preparing meals, doing housework, taking medications, and managing money) was performed. Helberg (1993) found that individuals with the ability to complete both basic and instrumental activities of daily living upon admission to the community home care program, were more likely to be independent at discharge and less likely to be institutionalized (Helberg, 1993).

There was no difference in the scores of activities of daily living of those admitted for home care services and those who were not receiving the services and thus, the level of independence in ADL tasks was the same for the two groups (Kempen & Suurmeijer, 1991). Helberg (1994) found that a typical home care client regularly required help with either basic or instrumental activities of daily

living but that the informal care provider was almost always able to manage the care.

Care Providers

An informal care provider can be defined as an individual who provides aid to a client in the client's home or community in order to assist the individual to remain at home (Helberg, 1993). This may include family, friends, and neighbours (Magaziner & Cadigan, 1989). Supervision by an informal care provider often means the difference between institutionalization and being able to remain at home (Disler, Roy, & Smith, 1993).

As severity of illness increases, it is the presence of an informal care provider within the home that appears to be the critical factor in determining whether an individual can remain at home or will require institutional care (Glick, 1994). Care provider stress can lead to a client's institutionalization and, therefore, the burden of the care provider must be assessed, as institutionalization may be able to be avoided if the intensity of burden is caught early and assisted (Bernstein, 1992).

In a study which examined the correlation between activities of daily living function and the level of care needed, Disler, et al. (1993) concluded that, in addition to the measurement of ADL and loss of physical function, the individual's social support must be considered. Care provider strain, lack of support services,

and moderate to severe impairment of the ability to perform ADL are three main reasons for institutionalizing community long term care clients (Bernstein, 1992). For example, a client with dementia may only require supervision and prompting from an informal care provider for basic activities of daily living in order to continue to remain at home. However, a lack of support services for the care provider can result in excessive burden and eventual institutionalization of the client (Spector, 1991).

Educational series and support groups for the care providers may be useful in preventing burn-out. For example, Butin (1991) focused on the three factors of independence in ADL, the practical aspects of the client's condition and safety within the home environment in order to assist care providers with the ability to continue to care for the Alzheimer client at home.

Formal care providers consist of community groups, formal organizations and professionals who deliver care service. This could include formal programs set up by religious groups, specific service groups such as meals-on wheels, formal paid support by agency workers such as homemakers and home health aides, as well as professional supports of physicians and other professional health care providers (Magaziner & Cadigan, 1989).

Summary

The literature identifies five main factors that are related to independent

community living. These are perceived health and physical status (which includes perceived health status, medication management, and nutritional status), cognitive function, psychosocial function, activities of daily living function and the use of care providers. Perceived health and physical status have been found to be good predictors of morbidity and mortality (Van Rossum, 1993). Cognitive function should be included in eligibility criteria for admission to community long term care as they can impact daily functioning (Bernstein, 1992). Assessment of memory, orientation, and judgement provide information that would indicate impact of daily functioning (Spector, 1991, Worall & Moulton, 1993). Psychosocial function has been shown to be an important predictor of institutionalization, as well as care provider burden (Helberg, 1993, Spector, 1991). Activities of daily living assessments should include both basic and instrumental tasks (Bernstein, 1992, Fredericks, et al., 1991, Saba & Zuckerman, 1992). Finally, the need for and the use of care providers need to be assessed to identify the community services that would help care providers look after clients in the community (Disler, et al., 1993, Helberg, 1993). The degree of limitation in each of these areas affect an individual's daily functioning and, as a result, the individual's ability to reside independently in the community (Bernstein, 1992).

Part Three: Referral Process and the AAPI

A description of the **home care referral process** and the use of the **AAPI**

are reviewed. This is followed by the rationale for the study.

The Home Care Referral and Assessment Process

In Alberta, long term care is a continuum of care, with home care as the first step within this continuum (Alberta Health, 1992a). Referral for home care services can be made by the client themselves, health care professionals, family, or friends (Alberta Health, 1992a). Once a referral is received, each client is assigned a case coordinator who performs a home visit to assess the client's current needs. The case coordinator could be from any of the following disciplines: occupational therapy, nursing, social work or physical therapy (Alberta Health, 1993a). Information from this initial assessment is documented by the case coordinator on the Alberta Assessment and Placement Instrument (AAPI) (Alberta Health, 1989) (see Appendix C).

Once a person is assessed, the case is discussed with a team consisting of members of each of the disciplines (as above) and the decision to admit or to not admit that individual is made based on the team member's feedback and the information gathered on the AAPI. For those who are admitted, the services are based on the AAPI findings. Services are based on a client-centred approach, that is, the client is the primary decision-maker throughout the total care process. The services utilized may include support services such as personal care, homemaking, and volunteer services; and professional services such as nursing, occupational

therapy, physical therapy, respiratory therapy, social work, and nutrition counselling (Alberta Health, 1993a). Case coordination is the key process in the delivery of the program. This process includes assessment, needs identification, care planning, implementation, evaluation, and discharge and are all performed by the case coordinator. It is a circular and fluid process and the time spent at each stage depends on the individual situation (Alberta Health, 1993a). The responsibility of the case coordinator includes informing the client of the available care options, as well as offering and setting up appropriate professional and support services within the home care program. The case coordinator liaises with other community agencies and other health professionals that are involved in the client's care, and provides continual monitoring of services and reassessment of needs (Alberta Health, 1990). Despite the increasing reliance on home care, home care in Canada is still considered to be underdeveloped and not fulfilling all of the demands placed upon it (Schwenger, 1987).

The Alberta Assessment and Placement Instrument

In 1989, as part of the continuum of care, Alberta Health created the Alberta Assessment and Placement Instrument or AAPI (Alberta Health, 1991). It provides comprehensive evaluation and placement recommendations for individuals applying for long term care (McKenzie, et al., 1989). Although the AAPI originates in the community with the home care program, the same document is transferred to a

long term care institution if institutionalization becomes necessary (Alberta Health, 1992a). The home care case coordinator performs the general assessment during an interview with the client alone or with the client and his or her family members (Alberta Health, 1993a). The AAPI is designed to allow documentation of one initial assessment and two reassessments. This facilitates comparison of performances between assessments (Alberta Health, 1989).

The Multidisciplinary Adult Assessment (MAA) was used as the foundation for the AAPI. The MAA assesses the client, the home environment, and the status of the care provider (McKenzie, et al., 1989). The MAA was initially created to coordinate and integrate community services for the frail elderly population and was used in a community setting to translate older adults' functional needs into service needs (Anderson, 1982). In order to create the AAPI from the MAA, extensions and modifications were made based on the needs of home care and institutional care within the province (McKenzie, et al., 1989). The AAPI is used to record information about the client's health status, functional status, mental and psychosocial status, support system, and the environment in which the client resides (Alberta Health, 1989).

There are two distinct components of the APPI: a multidimensional assessment and a decision rule for placement (McKenzie, et al., 1989). The AAPI is divided into six sections. Section one contains the initial need identified, the type of service requested and demographic information. This information is

gathered on telephone by the intake worker in the unit office, documented on the AAPI and supplemented by the case coordinator interviewing the client during the home visit (Alberta Health, 1993a). Section two is concerned with a comprehensive health assessment consisting of five areas: physical status, mental status, psychosocial status, environmental appraisal and social history. **Physical status** includes the applicant's perceived needs, baseline health data, medication management, and physiological areas of vision, hearing, communication, nutrition, tissue and skin integrity, elimination, comfort, respiration, circulation, and physical function. Also included in this area are activities of daily living, personal care, mobility, and activities of household management (Alberta Health, 1989). **Mental status** includes awareness, orientation, memory, judgement and decision making ability. **Psychosocial status** includes anxiety, depression, suicide ideation, paranoia, agitation, aggression, hoarding, wandering, ingestion of foreign substances, substance abuse, smoking behaviour, sexuality, social interaction, spirituality, and management of alterations in mental and psychosocial status (Alberta Health, 1989). **Environmental appraisal** includes observable problems with the applicant's living environment and **social history** includes place of birth, places lived, family history, education, and occupation (Alberta Health, 1989).

Section three of the AAPI focuses on information about care providers. This includes both informal and formal care providers, the availability of the care provider, names of care providers, and the type and frequency of both the

community and institutional based services (Alberta Health, 1989).

Section four of the AAPI is a summary that serves as a supplement to the full assessment (Alberta Health, 1989). Section five is the placement recommendation decision tree. Section six is the placement summary which lists the placement options, placement rationale, action taken, and further referral (Alberta Health, 1989).

Case coordinators from various disciplines are trained by Alberta Health through the two-day AAPI Training Program which certifies the assessor. This training program develops a case coordinator's assessment skills and helps to ensure that all assessors are performing the assessment and documentation in a consistent manner throughout the province (Alberta Health, 1993a). An AAPI reference manual was created to accompany the workshop and is given to each of the assessors. It describes each area of assessment, lists areas that should be assessed and how one assesses them, and also provides a list of areas to consider that would have an impact on the area being assessed (Alberta Health, 1989).

Interrater reliability, the consistency of measurement between two or more raters (Payton, 1993), was evaluated for the AAPI in 1989 with 82 newly referred clients who resided in both institutions and the community (mackenzie, et al., 1989). After attending the training workshop, 13 pairs of nurses assessed both institutional and community clients, with one interviewing and the other observing. Percent agreement between interviewers and observers was 77.2%. Kappa

agreement ranged from .67 to .76 for the four placement levels of home care, nursing home, auxiliary care, and non-long term care (McKenzie, et al., 1989) but the authors do not specify agreement for home care. With respect to the areas assessed on the AAPI, there was 100% agreement for the environmental and treatment items, and 96% for the medical condition item. The functional status items averaged 89.7%, 100% for the environmental items, 100% for the treatment items, and the behavioural items were 83.1% (McKenzie, et al., 1989). Results of cognitive status and care provider status were not reported in the literature.

Further reliability testing was done by McKenzie, et al. (1989) using test-retest on a sample of 50 clients. These clients were initially assessed, then placed, and reassessed with the AAPI one month after placement. Eighty-four percent agreement was obtained. Even though it has been stated that the AAPI appears to be a "reliable, valid, well-accepted and usable" long term care instrument (McKenzie, et al., 1989, p. 941), further investigation of validity is needed.

Summary of the Referral Process and Use of the AAPI

Referral to home care, which is the first step of the long term care continuum, could be facilitated by anyone (Alberta Health, 1992a). The assigned case coordinator performs an assessment in the home and documents the data on the AAPI (Alberta Health, 1989). Decision to admit or not admit the client to home care includes input from the team at case review (Alberta Health, 1993a).

This is followed by setting up appropriate professional and support services. The AAPI, patterned after the MAA, is multi-dimensional and includes assessment in the five previously identified factors related to independence (Alberta Health, 1989). The AAPI continues to be widely used in Alberta but the reliability and validity of the instrument need to be further examined.

Rationale for the Study

The purpose of the AAPI is to provide a comprehensive evaluation of the long term care client, facilitate a placement recommendation for long term care, and facilitate the process of case management (McKenzie, et al., 1989). In order to fulfil all three purposes, the instrument should be both reliable and valid. The reliability of an instrument can be defined as the ability to provide the same outcome over time or between raters (Payton, 1993). Validity, in general terms, refers to the appropriateness, truthfulness, authenticity, and effectiveness of a instrument (Payton, 1993).

Inter-rater and test-retest reliability appears acceptable as reported in the study by McKenzie, et al. (1989). Face validity is described as the general acceptance of the test by the participant and the rater (Payton, 1993), and content validity is described as looking at what is being measured and whether this is what was intended to be measured (Payton, 1993). The AAPI was constructed using a panel of experts in the area of long term care assessment and has been widely

accepted by the users over a six year period; thus it can be assumed that it has both face and content validity.

With respect to the use of the AAPI for **facilitating placement recommendations**, it is widely used at all placement levels, however, there is very little empirical data which supports its discriminative validity. If the AAPI is used to discriminate between individuals who need home care and those who do not, then these two groups of individuals should perform differently on certain components.

Therefore, this study examined cognitive status, as recommended by Bernstein (1992), Spector (1991), Wornall and Moulton (1993) and the five factors identified by McKenzie et al. (1989) (physical status, psychosocial and behavioral status, activities of daily living, and status of care providers).

CHAPTER 3

Methodology

Research Questions

This study addressed two research questions.

1. Is there a difference between clients who are admitted to home care and clients who are not admitted to home care, in physical, cognitive, psychosocial abilities, abilities in activities of daily living, and care provider status as measured on the AAPI?
2. Do clients who are admitted to home care and those not admitted to home care differ in status and location one year after the initial AAPI assessment?

Research Design

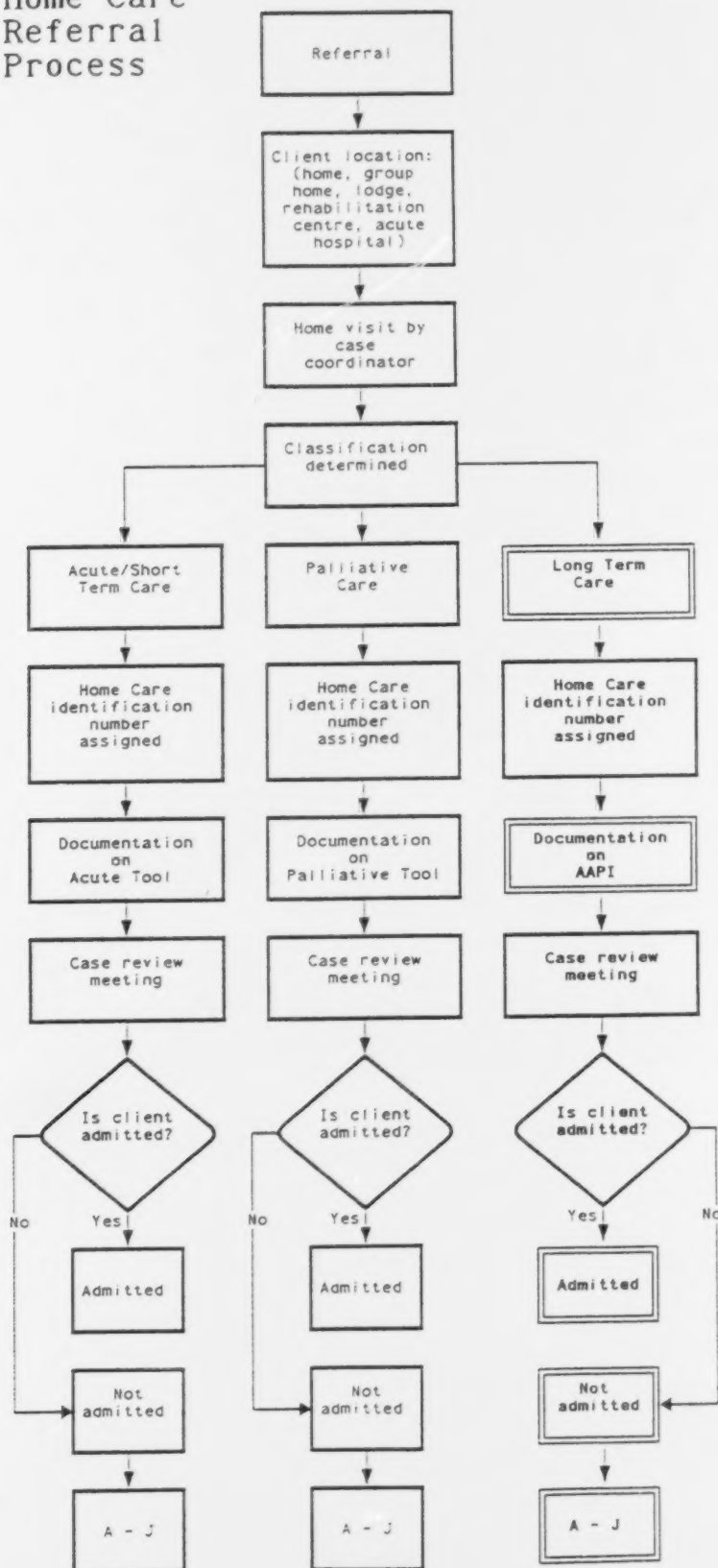
A retrospective chart review was used to compare AAPI performance measures of a group of elderly clients referred to home care and admitted to those of a group of clients referred, but not admitted. Discriminative validity was examined comparing the AAPI performances of the two groups. To determine the client's ability to remain in the community, a retrospective follow-up was done to determine the location of the clients in both groups one year after the initial AAPI assessment.

Admission to Home Care

Clients that are referred to home care for assessment may be residing at home, in a group home, lodge, rehabilitation center, or acute care hospital. Once an assessment is performed, the case coordinator classifies the case into one of three categories: acute short term care, palliative care, and long term care (see Figure 1). A home care identification number is generated using the Home Care Information System and assigned to that client. When long term care needs are identified, the AAPI is used to document the assessment findings. Short term acute assessments and palliative assessments use different documentation tools. The assessment information is discussed at a case review meeting to determine if the client will be admitted. All long term care home care clients have an AAPI located on their home care chart. For those clients who are not admitted to home care, it is at the discretion of the case coordinator to fill out the AAPI and thus, is not mandatory. Therefore, clients assessed for long term care but not admitted to the program, may not have AAPI documentation located on their home care chart.

Each case that is not admitted is labelled with an alphabetic code A to J which corresponds to a reason for not admitting the client to home care (see Appendix D).

Figure 1: Home Care Referral Process



Sample

Two groups of subjects were selected using stratified randomization. One group consisted of 60 subjects who represented all clients admitted to long term care home care in Edmonton during the period January 1 to December 31, 1992. The second group consisted of 60 subjects who represented clients who were not admitted to home care during that same time period. The sample size of 120 provided a power of .8 at an alpha level of .05 (see Appendix E). Stratification involved the selection of 20 cases for each group from each of the three offices in Edmonton (see Appendix F). Therefore, Edmonton-wide service distribution was represented.

A random numbers table was used to select the 60 subjects in each group. Clients who met the following inclusion criteria were numbered consecutively. The inclusion criteria for those in the admitted group were:

1. client was referred to the Edmonton Home Care Program between the dates of January 1, 1992 and December 31, 1992;
2. an initial AAPI was completed;
3. client was 65 years of age or older on assessment date;
4. client was on the long term care service of home care (not short term acute or palliative care).

The inclusion criteria for those in the not admitted group were:

1. client fulfils criteria 1 to 3 above;
2. client had reason D for non-admission: client and/or family can manage the care;
3. client lived within the Edmonton Board of Health service region. Using the time frame of one year provided a large enough pool for stratified randomization using consecutive numbering and a random numbers table. The time span also captured seasonal changes. The time frame of 1992 also allowed the one year follow-up to be retrospectively reviewed within the 1993 chart and computer records.

Only individuals who required long term care were selected. Palliative and acute care clients were excluded from this study; these are distinct populations with different needs and service provisions that should be studied separately. For clients admitted to home care, the provincial criteria as set forth in the Public Health Act were met (see Appendix G).

Clients not admitted to home care generally fall into one of two categories: those whose needs exceed the home care mandate and are of higher need than services offered, and those whose needs are not enough to require home care services. For this study, the group whose needs were not enough to require home care was chosen. Several of the Non-admission Codes (see Appendix D) fall into this category. Based on the availability of charts to fulfil sample size and the desire of the Edmonton Home Care Program to examine those individuals who

have stated that they can manage without assistance from home care, code D was chosen (see Appendix D). All other codes were excluded. For example, codes A, C, E, G, and J were decisions of non-admission based on provincial regulations that were beyond the control of the client and the assessor and thus were not included within this study. Clients with code F were excluded because they needed care beyond the home care mandate, which was not the focus of this study. Clients of code H were also excluded, as they refused the care offered. Due to the inaccessibility of clients that were assessed by a case coordinator within a hospital setting but referred to a location beyond the Edmonton Board of Health service jurisdiction, clients with code B were excluded from the study. The age criterion of 65 was used in order to allow for comparisons with the literature.

Data Collection

The investigator reviewed the 120 Edmonton Board of Health - Home Care Program charts to gather the data. Demographic information included age, gender, residence, living arrangement, and diagnoses. Physical status included measures of perceived need, medication management and nutritional status. Cognitive status included measures of memory, orientation, judgement and decision-making. Psychosocial status included measures of depression, wandering, ineffective coping and potential for injury to self and others. Activities of daily living included basic activities such as eating, dressing, grooming, bathing, toileting, and transfers, and

instrumental skills such as shopping, money management, meal preparation and house-cleaning. Use of care providers included the presence of and need for informal and formal care providers. These five areas were chosen based on the findings described in the literature, and as well, are the areas that are commonly assessed and treated by occupational therapists. Physical status (Van Rossum, 1993), cognitive function and psychosocial function (Bernstein, 1992, Spector, 1991, Worall & Moulton, 1993) impact the individual's performance in daily functioning (Bernstein, 1992) and result in direct need for either formal or informal care provision (Disler, et al., 1993, Helberg, 1993).

For the first research question, which addressed discriminative validity, the information from the AAPI was recorded on the data gathering sheet. The data was gathered directly from the AAPI with the categories described in full (i.e.: six levels of status in performing ADL) and placed on the data sheet (see Appendix H). For the categorical data, the information was compressed into two categories: independent and needing help. For the category of independent, the AAPI ratings of independent and independent with special devices were included. For the category of needing help, the AAPI ratings included the areas of able to manage with assistance to set up, able to manage with some supervision and assistance with the applicant participating, unable to manage, needs constant supervision or assistance of one person and unable to manage, needs constant supervision and assistance of two persons. This was done to indicate that help from another person

was needed (not specifically how much help was needed, nor the type of help).

To look at the follow-up location of residence one year post-assessment, the following codes were used:

1. residing in the community without home care support;
2. residing in the community with home care support;
3. residing in a long term care institution (nursing home or auxiliary hospital) within Edmonton;
4. deceased.

The Home Care Information System was used to discern whether the client was admitted to home care or not, and the record of vital statistics recorded on the home care information system was used to track clients who had deceased. To establish whether or not the individual was residing in a long term care institution within Edmonton one year post-assessment, the computerized information at Central Assessment and Placement Regional Services was used to establish whether a client was institutionalized for long term care on that date.

Data Analysis

The Statistical Package for the Social Sciences (SPSS, 1993) was used to analyze the data. There was no missing data in the data collection. T-tests were used to compare means for continuous data, and chi-square analysis was used to compare nominal and categorical data of the AAPI measures between the two

groups. The level of significance was set at $p \leq .05$. The demographic data of age, gender, marital status, living arrangement, type of residence, diagnostic condition, and perceived need were analyzed first. To examine the discriminative validity, each of the AAPI measures were examined separately but discussed under the following sections: physical status, cognitive status, psychosocial status, activities of daily living, and care provider status. A total score for each section was not obtained, as the AAPI was not designed for that intention. A follow-up was performed to identify the location of the individual one year post-assessment.

Ethical Considerations

Confidentiality of the participant was assured by using only code numbers rather than surnames on the data collection summaries. All survey record sheets were coded with a number and client names did not appear on the raw data, nor will they on any future published data. As only a chart review was used, no new participant consent was needed because all clients who had an assessment documented on the AAPI consented to the release of information as stated on page two of the form, and thus, a new consent specific to this study was not needed. Ethical approval was granted by the Edmonton Board of Health Research and Ethics Committee (see Appendix H) and filed with the Faculty Ethics Committee at the University of Alberta, Faculty of Rehabilitation Medicine.

CHAPTER 4

Results

Participant Demographic Characteristics

Several areas of demographics were examined. Table 1 presents a comparison between the two groups in mean age, gender distribution and marital status. The groups were comparable in all three. In both groups, the mean ages were over 75 years. In the group admitted, the number of women exceeded the number of men 1.3 times, and in the group that was not admitted, the number of women exceeded the number of men 2.1 times. In both groups, approximately half of those referred were widow(er)ed and one third were married.

Living arrangement and type of residence of individuals in the two groups are listed in Table 2. Sixty percent of those admitted to home care lived with someone compared to 40% of those not admitted. Between group differences were not statistically significant. Most individuals (92% of those admitted to home care and 97% of those not admitted to home care) resided in a single family dwelling, an apartment, or a multi-family dwelling. Eight percent of the group admitted to home care lived in lodges compared to 2% of the group not admitted to home care. No participants reported living in rooming houses or group homes.

Table 1: Demographic Characteristics

	Admitted (n = 60)	Not Admitted (n = 60)	t-test	p ≤
<u>Mean age</u> (SD)	79.8 (7.5)	77.8 (8.2)	t = 1.32	NS
Range	65 - 96	65 - 98		
<u>Gender</u>			chi-square (df)	
Number of men (%)	26 (43)	19 (32)		
Number of women (%)	34 (57)	41 (68)	1.74 (1)	NS
<u>Marital Status</u>	Number (%)	Number (%)	chi-square (df)	
Single	5 (8)	6 (10)		
Married	22 (37)	18 (30)		
Separated	1 (2)	0 (0)		
Divorced	3 (5)	5 (8)		
Widow(er)ed	29 (48)	31 (52)	2.05 (4)	NS

Note. NS = not statistically significant

Table 2: Living Arrangement Description and Type of Residence

Living Arrangement	Admitted (n = 60) Number (%)	Not Admitted (n = 60) Number (%)	chi-square (df)	p≤
Alone	24 (40)	36 (60)		
With spouse only	19 (32)	14 (23)		
With spouse and others	3 (5)	2 (3)		
With others only	4 (7)	2 (4)		
With other family	10 (16)	6 (10)	6.15 (4)	NS
Type of residence	Number (%)	Number (%)		
Single family dwelling	37 (62)	37 (62)		
Apartment/multifamily dwelling	18 (30)	22 (36)		
Rooming house	0 (0)	0 (0)		
Group home	0 (0)	0 (0)		
Lodge	5 (8)	1 (2)	2.89 (2)	NS

Note. NS = not statistically significant

Table 3 presents a comparison between the two groups in reported diagnosis (differentiation between primary and secondary diagnoses was not reported, only that the diagnosis was present). Most participants (84% in the group admitted to home care and 87% in the group not admitted to home care) had multiple diagnoses. The diagnosis most commonly reported in the group admitted was a cardiac condition. The next most commonly reported diagnosis for that group was musculoskeletal (which includes arthritis and orthopaedics). Conversely, the most commonly reported diagnosis for those not admitted was musculoskeletal and the second was cardiac condition. Twice as many of those not admitted reported a diagnosis of diabetes ($n = 18$) compared to those who were admitted ($n = 9$). There were twice as many of those admitted to home care with a diagnosis of a mental health condition ($n = 14$) compared to those who were not admitted to home care ($n = 7$).

The clients' perceived needs in five functions are listed in Table 4. Between group differences in distribution were not statistically significant for any of the areas of perceived need. Help with activities of daily living was perceived by both groups as the most common need compared to the other four functions; 70% of individuals admitted to home care reported a perceived need in this area and 65% of those not admitted to home care. Care provider help, either needing initial help or needing more help to supplement their present care provision, was reported

Table 3: Diagnostic Conditions

Condition Reported	Admitted	Not Admitted
	Number (%)	Number (%)
Cardiac	36 (60)	35 (58)
Neurological	18 (30)	18 (30)
Diabetic	9 (15)	18 (30)
Musculoskeletal	28 (47)	41 (68)
Respiratory	10 (17)	15 (25)
Mental health	14 (23)	7 (12)
Other	17 (28)	10 (17)

Note. "Other" represents cancer, gastrointestinal and skin conditions.

A client may have more than one diagnostic condition.

Differences in proportions were not statistically significant using chi-square analyses.

Table 4: Perceived Need

Client's Perceived Need	Admitted	Not Admitted
	Number (%)	Number (%)
	(n = 60)	(n = 60)
Physical Functioning	5 (8)	12 (20)
Cognitive Functioning	2 (3)	0 (0)
Psychosocial Functioning	0 (0)	2 (3)
Activities of Daily Living	42 (70)	39 (65)
Care Provider Help Needed	19 (32)	12 (20)

Note. Differences in proportions were not statistically significant using chi-square analyses.

by both groups as the second most common need; 32% of those admitted to home care perceived a need in care provider help while 20% of those in the not admitted group perceived this need.

A comparison was made between the two groups in the mean number of medications, medication management, and nutrition (see Table 5). There was no statistical difference between the two groups in the number of medications. However, differences in medication management between the two groups were statistically significant ($X^2 = 9.64$, $df = 4$, $p \leq .05$). Significantly less individuals on home care were able to self-administer medication (60%) compared to those not on home care (75%). Twenty-three percent of those admitted needed their medication given to them by others, whereas only five percent of those not on home care required this type of help. There was no difference between the two groups in nutritional intake and management (see Table 5).

Table 6 presents a comparison between the two groups in basic activities of daily living and instrumental activities of daily living. In both groups, the number of individuals who could independently perform basic or instrumental activities of daily living far exceeds those who require assistance. The number of individuals requiring help were still substantial in both groups. Between group differences were not statistically significant. Of all the basic ADL tasks, bathing was most commonly reported as an area with which both groups required help, 35% of those admitted to home care and 80% of those not admitted to home care.

Table 5: Medications and Nutrition

	Admitted (n = 60)	Not Admitted (n = 60)	t-test	p≤
<u>Medications</u>				
Mean number of Medications (SD)	5.3 (3.12)	6.3 (3.67)		
Range	(0 - 13)	(0 - 14)	1.55	NS
<u>Medication Management</u>				
	Number (%)	Number (%)	chi-square (df)	
Self administers	36 (60)	45 (75)		
Needs assistance to set up	6 (10)	5 (8)		
Some supervision needed	4 (7)	7 (12)		
Medications given by others	14 (23)	3 (5)	9.64 (3)	.05
<u>Nutrition</u>				
Adequate intake	54 (90)	50 (83)		
Needs help	6 (10)	10 (17)	1.15 (1)	NS

Note. NS = not statistically significant

Table 6: Activities of Daily Living (ADL)

Basic ADL	Admitted Number (%) (n = 60)	Not admitted Number (%) (n = 60)	chi-square (df = 1)	p ≤
<u>Eating</u>				
Independent	54 (90)	56 (93)		
Needs help	6 (10)	4 (07)	.44	NS
<u>Dressing</u>				
Independent	50 (83)	51 (85)		
Needs help	10 (17)	9 (15)	.06	NS
<u>Grooming</u>				
Independent	50 (83)	51 (85)		
Needs help	10 (17)	9 (15)	.06	NS
<u>Bathing</u>				
Independent	39 (65)	30 (50)		
Needs help	21 (35)	30 (50)	2.76	NS
<u>Toileting</u>				
Independent	53 (88)	57 (95)		
Needs help	7 (12)	3 (05)	1.75	NS
<u>Transferring</u>				
Independent	48 (80)	53 (89)		
Needs help	12 (20)	7 (11)	1.56	NS

Note. NS = not statistically significant

Table 6: Activities of Daily Living (ADL) (Cont.)

Instrumental ADL	Admitted Number (%) (n = 60)	Not admitted Number (%) (n = 60)	chi-square (df = 1)	P≤
<u>Money management:</u>				
Independent:	27 (45)	26 (43)		
Needs help	33 (55)	34 (57)	.03	NS
<u>Meal preparation:</u>				
Independent:	26 (43)	25 (42)		
Needs help	34 (57)	35 (58)	.03	NS
<u>Cleaning:</u>				
Independent:	3 (05)	8 (13)		
Needs help	57 (95)	52 (87)	2.5	NS
<u>Shopping:</u>				
Independent:	14 (23)	12 (20)		
Needs help	46 (77)	48 (80)	19	NS

Note. NS = not statistically significant

Table 7 presents a comparison between the two groups in the area of cognitive function. No statistical difference was reached and similar numbers of individuals required help with orientation, memory and judgement in both groups.

Psychosocial function of both groups were compared and the results are presented in Table 8. Between group differences were not statistically significant. Two to ten percent of both groups reported the presence of depression and wandering. Thirty-three percent of those admitted to home care and 22% of those not admitted reported difficulty with coping. The risk of injury to self was commonly reported by both groups; 27% of those admitted to home care and 33% of those not admitted to home care reported a risk of injury to self, whereas the risk of injury to others was less commonly reported.

Comparisons between the two groups in the use of informal and formal care providers are presented in Table 9. Both groups were comparable in the use of informal care providers, formal community care providers, and formal institutional care providers. A large percentage of both groups reported a need for informal care providers; 63% in the group admitted to home care and 70% in the group not admitted reported a need. Formal community care providers included day programs, foot clinics, counselling clinics, and meals on wheels and were utilized by 33 % of those admitted to home care and 25% of those not admitted. Institutional care provision included admissions to acute hospitals, day surgery and

Table 7: Cognitive Status

Cognitive Function	Admitted Number (%) (n = 60)	Not Admitted Number (%) (n = 60)	chi-squared (df = 1)	p≤
<u>Orientation</u>				
Intact	52 (87)	51 (85)		
Needs help	8 (13)	9 (15)	.07	NS
<u>Memory</u>				
Intact	37 (62)	37 (62)		
Needs help	23 (38)	23 (38)	0	NS
<u>Judgement</u>				
Intact	44 (73)	46 (77)		
Needs help	16 (27)	14 (23)	.18	NS

Note. NS = not statistically significant

Table 8: Psychosocial Description

Psychosocial Function	Admitted Number (%) (n = 60)	Not admitted Number (%) (n = 60)	chi-square (df = 1)	p $\leq$
<u>Depression</u>				
Absent	54 (90)	55 (92)	.10	NS
Present and needs help	6 (10)	5 (08)		
<u>Wandering</u>				
Does not wander	57 (95)	59 (98)	1.03	NS
Present and needs help	3 (05)	1 (02)		
<u>Coping</u>				
No intervention needed	40 (67)	47 (78)		
Intervention needed	20 (33)	13 (22)	2.05	NS
<u>Risk of Injury to Self</u>				
No intervention needed	44 (73)	40 (67)		
Intervention needed	16 (27)	20 (33)	.63	NS
<u>Risk of Injury to Others</u>				
No intervention needed	56 (93)	55 (92)		
Intervention needed	4 (07)	5 (08)	.12	NS

Note. NS = not statistically significant

Table 9: Use of Formal and Informal Care Providers

	Admitted Number (%) (n = 60)	Not Admitted Number (%) (n = 60)	chi-square (df = 1)	p≤
<u>Informal Care Providers</u>				
Not needed	22 (37)	18 (30)		
Needed	38 (63)	42 (70)	.60	NS
<u>Availability of Informal Providers</u>				
None available	21 (35)	19 (32)		
Available	39 (65)	41 (68)	.15	NS
<u>Formal Community Care Providers</u>				
Not utilized	40 (67)	45 (75)		
Utilized	20 (33)	15 (25)	1.0	NS
<u>Formal Institutional Care Providers</u>				
Not utilized	28 (47)	19 (32)		
Utilized	32 (53)	41 (68)	.28	NS

Note. NS = not statistically significant

respite hospital care. This was utilized by over half of all subjects.

Summary

Sixty individuals who were assessed with the AAPI and admitted to home care were compared to 60 individuals assessed and not admitted to home care. In both groups the mean ages were over 75 years of age, the number of women exceeded the number of men, most were either married or widow(er)ed, most resided in either a single family dwelling, an apartment or a multi-family dwelling and the majority of individuals did not live alone. Cardiac and musculoskeletal conditions were the most common diagnoses in both groups. The majority of individuals perceived a need for help in either activities of daily living or care provider help.

Medication management was significantly different between the groups, with more help needed for those who were admitted to home care. No areas of ADL were significantly different between groups but bathing was the area of basic ADL most commonly reported as needing help for both groups. Instrumental activities of daily living were commonly reported by both groups as needing help, but were not statistically different between groups.

No areas of cognitive functioning, psychosocial abilities, or care provider status were statistically significant. Based on the above findings, the AAPI did not discriminate between these two groups, with the exception of medication

management.

Location One Year After AAPI Assessment

The status and location of the subjects one year after the initial AAPI evaluation is reported in Table 10. One year after the initial evaluation, significantly more of the individuals initially not admitted to home care were now on home care (42%) compared to those who were originally on home care. Only 18% of those who were initially admitted remained on home care one year after the initial assessment.

Sixty-three percent of those initially admitted to home care were discharged from home care and living in the community without home care support. For those that were initially not admitted, 58% were in this category. Five participants from the group admitted and one from the group not admitted were deceased one year after the assessment.

There was a statistically significant difference between the groups in the number of individuals admitted to a long term care institution one year after the initial assessment. Ten percent of the clients initially admitted to home care were in a long term care institution one year after the date of assessment and none were admitted to an institution from the group that were initially not admitted.

Forty-two percent of those not admitted to home care were admitted one year later, with statistical significance at $p \leq .005$. Six of those admitted were institutionalized one year later, with statistical significance at $p \leq .01$.

Table 10: Status and Location One Year After Initial (AAPI) Assessment

Status/Location	Admitted Number (%) (n = 60)	Not Admitted Number (%) (n = 60)	chi-square	p≤
<u>On Home Care 1 Year After</u>				
	11 (18)	25 (42)		
<u>Living in Community (No Home Care; No Institution)</u>				
	38 (63)	35 (58)		
<u>Admitted to a Long Term Care Institution</u>				
	6 (10)	0 (0)		
<u>Deceased</u>				
	5 (08)	1 (02)		
			5.0	.001

CHAPTER 5

Discussion

This chapter includes **discussion** of the results, **clinical implications** of the study, **research implications**, **limitations** of this study, and **conclusion**.

Characteristics of Subjects

As there were no significant differences between the two groups in age, gender, marital status, living arrangement and residence, it can be concluded that the two groups were comparable, and as this was a random stratified sample, it is representative of clients over the age of 65 years referred to long term care home care in Edmonton.

As expected, there were more women than men in both groups. This is consistent with the home care literature (Dellasager & Stricklin, 1993, Glick, 1994, Health & Welfare Canada, 1992b, Kempen & Suurmeijer, 1991). Most of the subjects in this sample were either widow(er)ed or married. This is evidenced in the literature in studies of home care individuals (Dellasega & Stricklin, 1993) and is also consistent with that of the aging population (Statistics Canada, 1991).

Most subjects were living in single family dwellings either alone or with their spouse. There were more married subjects than those living with their spouse; this may be indicative that their spouse may have been institutionalized or that

another family member has come to live with them to assist them with their needs. There was a greater number of subjects living with either spouse and others, or other family members. For example, support of a live-in family or friend care provider or the supportive environment of a lodge may be present.

In both groups the most frequent diagnosis was cardiac condition; this was also reported in the literature as the most frequent diagnosis of elderly community dwelling individuals (Esposito, 1992, Helberg, 1994).

Perceived Need

In both groups, the majority of subjects perceived a need for help in their activities of daily living. As well, in both groups, the subjects perceived a need for help with care providers. This may be either initial help needed or the need for additional help if they already had a care provider.

Use of Medication

More individuals administered their own medications in the group not admitted to home care, and more of those admitted had medications given by others. A statistically significantly greater percentage of individuals admitted to home care (40%) required some assistance with medication management compared to 25% of those not admitted, even though clinically 25% is also deemed high. This has an implication to care provision for home care; the preparation and

administration of the medication may be a role carried out by a formal care provider (e.g.: home care nurse) or an informal provider (e.g.: spouse or family member). In this study, the area of medication administration as measured on the AAPI discriminated between those admitted to home care and those not admitted.

Activities of Daily Living Function

Help with bathing was reported most frequently by both groups compared to other activities of daily living. The prevalence was higher in the group not admitted to home care although the difference in distribution was not statistically significant. All other areas of activities of daily living were mostly reported as independent. As would be expected, this demonstrates independent performance in most areas of basic activities of daily living by both groups, which is in agreement with Delesaga and Stricklin (1993) who concluded that the ability of older individuals to remain residing at home depends to a large extent on their ability to perform their own self-care.

Help with cleaning was the instrumental activity of daily living most frequently reported by both groups compared to other instrumental task. Similarly, a large percentage of subjects needed help with shopping. This may be due to the subjects' inability to get out or may be indicative of a task too complex for them to master at their current functional level. More than half the participants in either

group stated that they needed help with money management and meal preparation.

The slow onset of chronic diseases permit individuals to adapt to their physical changes and thus develop compensatory skills to maintain their independence in basic activities of daily living. Pearlman and Crowne (1992) identified that impairments in both basic and instrumental activities of daily living were indicators of chronic life stress. Those subjects that exhibited difficulty in basic and instrumental tasks may be prone to chronic life stress associated with their chronic diseases.

Cognitive Function

In both groups, a substantial number of subjects were found to have memory impairments. This is an area that needs to be considered when planning any home care intervention program; this has implications for all health disciplines. For occupational therapists training functional skills adaptation, physical therapists teaching a home exercise program, or nurses teaching medication management, the individual's memory skills must be assessed first. If memory problems are detected, either memory cuing or other memory enhancing strategies may need to be implemented, and formal and informal help may need to be present to assist with the task.

Twenty-three percent of those admitted to home care and 27% of those not

admitted reported difficulty with orientation, and 27% of those admitted to home care and 23% of those not admitted to home care reported needing help with their judgement skills. For those individuals that need help with prompting, supervision or decision-making due to decreased cognitive status, this has a direct impact on the care provider role and responsibilities. Generally, there will be an increased demand of time from the care providers, ranging from intermittent reminding to more constant supervision, especially if more than one area of cognition is impaired. Several authors have suggested that cognitive function be an integral part of admission criteria for long term care (Spector, 1991, Worall & Moulton, 1993) and this includes assessment for home care admission as well as institutional admission.

Psychosocial Function

The most frequently reported area needing intervention, by both groups, was that of risk of injury to self. As the AAPI does not collect data on the type of risk of injury, it can be surmised that living alone may increase the risk of injury. The risk of falls, memory deficits that lead to environmental risk factors (e.g.: leaving a burner on), and reported difficulty with both bathing and taking medications may bring the individual to perceive that they are at risk of injuring themselves.

Another frequently reported area of psychosocial function requiring intervention, by both groups, was that of coping. This can be the individual's lack of ability to deal with emotional problems or physical stress. This includes

depression, anxiety, suspicion, and agitation. Difficulty in this area may place increased demands on both formal and informal care providers.

Both groups reported they did not need intervention in the areas of depression, wandering, and risk of injury to others. Even though depression is common in the elderly population living at home (Bernstein, 1992), Kempen and Suurmeijer (1991) found that there was no significant difference between those utilizing home care and those not, on measures of depression (as measured by the Self-rating Depression Scale) or loneliness (as measured by the Loneliness Scale). These two variables may be related to well-being but do not appear to be related to the utilization of home care.

Care Providers

Informal Care Providers

Both groups frequently reported that they needed an informal care provider. This identified need for a care provider was also consistent with the reported availability of an informal care provider. Sixty-three percent of the group admitted to home care identified a need for a care provider and 65% reported that one was available; 70% of those not admitted to home care reported a need for an informal care provider and 68% reported that one was available. Although this is relatively consistent with the literature (Bernstein, 1992, Disler, Roy, & Smith, 1993, Spector, 1993), Dellasager and Stricklin (1993) reported primary informal care provider

availability higher than this study, at 76%. If the premise of those with a strong informal support network is to rely on very little to virtually no formal care providers (Kempen & Suurmeijer, 1991, Magaziner & Cadigan, 1989), then we should see a difference between the two groups, but we do not. Individuals not admitted to home care were not admitted because they stated that they could manage the care and thus, home care services were not needed. It could be surmised that the informal care providers were adequate and assisted with the provision of the care. However, there is no difference between the two groups, and the results suggest that individuals who were not admitted have similar informal care provider needs as compared to those admitted to home care. Chappell (1985) found that users of home care, in comparison to those not using home care, were more likely to receive help from an informal care provider but this has not been demonstrated in this study. If items on the AAPI are not specific enough to discriminate between the two groups, the questions relating to informal care providers may need to include several categories, similar to other items on the AAPI, rather than just dichotomous.

Formal Community Care Providers

Formal community care providers included agencies and private practitioners such as counsellors, physicians, and meals on wheels. In this study, 33% of individuals admitted to home care utilized formal community care providers. This

is substantially lower than the proportion reported by Magaziner and Cadigan (1989) who found that 67% of their home care population had formal community care providers. Both the availability of and the accessibility to community-based formal support has been shown to deter admission to a long term care institution (Abele, 1991, Doty, 1986, Dwyer, et al., 1994). The results of this study indicate that the home care provider could place more emphasis on sharing resource information with clients in order to increase the use of formal community care providers.

Formal Institutional Care Providers

Formal institutional care providers included the use of a long term care facility, general hospital, mental health facility or the emergency department. A greater percentage of individuals not admitted to home care had utilized these services (68%) compared to those who were admitted to home care (53%). In a study by Magaziner and Cadigan (1994), the number of hospital admission days was slightly greater for those who live alone (2.52 days) in comparison to those living with someone else (2.15 days). Also, those who were married and living with their spouse tended to have fewer home care visits, which suggests that spouses substitute for formal care provision thereby decreasing the length of stay in a hospital (Helberg, 1994).

It is undetermined at this time, but further analysis of the data may reveal

that those utilizing formal institutional care providers may be those individuals living alone. The AAPI does not appear to discriminate between the two groups in the areas of informal or formal care provision.

In summary, the only area that the AAPI appears to significantly discriminate between those admitted to home care and those not admitted to home care is in the area of medication management. All other AAPI measures studied were not statistically significant. If the AAPI were to be used as a tool to discriminate between groups, the sensitivity of the tool must be reviewed. It can also be surmised that if the tool is not discriminative between groups, it should not be used as a sole criterion measure for basing decisions to admit an individual to home care.

Location One Year after the Initial AAPI

Eighty-two percent of those admitted were not on home care one year after the initial assessment. However, 42% of those that were not admitted were home care clients one year later. This may indicate that the initial decision to not admit the individual to home care may have been too rigid, and that there may be a need to expand the services so that potential clients do not come to the point of crisis before they are admitted. Realizing that this is the group of Non-admission Code D: client and family can manage care, it may be important for the home care case coordinator to consider the provision of care in greater depth. For example, the

individual may be making a decision that places further stress on the informal care provider or the individual themselves. If this is revealed, it may lead to considering admitting those clients who state that they can manage the care but, in reality, will not over a period of time.

Sixty-three percent of those in the admitted group were living in the community and not on home care, compared to 58% of those not admitted. Of those not on home care one year after the initial assessment, 10% of those admitted were in a long term care institution while none of the group not admitted were.

Several authors have examined predictors for institutionalization. Advancing age (Shapiro & Roos, 1987, Steinbach, 1994), being female (Steinbach, 1994), poor self-perceived health status (Steinbach, 1994), number of ADL limitations (Pearlman & Crowne, 1992, Shapiro & Roos, 1987, Steinbach, 1994), living alone (Shapiro & Roos, 1987), existence of cognitive changes along with complex physiologic and psychologic needs (Dellasega & Stricklin, 1993, Pearlman & Crowne, 1992, Shapiro & Roos, 1987), having a previous long term institutional admission (Pearlman & Crowne, 1992), and having a lack of both formal and informal care provision (Dellasega & Stricklin, 1993).

This study does not clearly predict whether an individual will stay in the community or be institutionalized, but the original intent of the AAPI was to facilitate placement recommendation, and not to specifically predict recommendation.

In this study, the number of individuals admitted into a long term care institution after one year was six, and the difference between the groups was statistically significant. For the area of demographics, the mean age of these six individuals was 82 years, four of the six individuals were male, three of six were widow(er)ed, and only one individual lived alone. Three individuals had a diagnosis of Alzheimer's disease, with the remainder having a cardiac diagnosis. For the areas of perceived need and physical status, the individuals either had a perceived need in the area of ADL or care provider help. They took an average of five medications but five of the six were not able to self-administer their medications. For the area of ADL, bathing was reported as difficult, and almost all individuals had difficulties with all areas of instrumental activities of daily living. In the area of cognitive function, the majority had reported difficulty with orientation, memory and judgement. In the area of psychosocial function, three stated risk of injury to self. In the area of care providers, five of the six individuals had a need for informal care provision and the same individuals had a care provider available. Half of the individuals used both community and institutional formal care provision.

Even though there was a significant difference between those admitted and those not admitted, in the areas of admission to home care one year later and institutionalization one year later, it cannot be concluded that the AAPI can be used to predict institutionalization versus community living. It is also important to note

that these individuals who were not admitted and died were not admitted to an institution for their death. The AAPI did not clearly predict which individuals will continue to reside in the community.

Clinical Implications for Home Care Practice

The results of this study have several clinical implications. The first identified purpose of the AAPI is to provide a comprehensive evaluation of the individual. The AAPI fulfils the goal of describing the status of the client and the client's environment. The measures of the AAPI do not discriminate between those admitted to home care and those not admitted (of Code D). Based on this study, the AAPI does not appear to have discriminative power and thus, should not be used alone for admission criteria to home care. For example, the clinical input from the team and the assessor's judgement should also be considered, in conjunction with the data gathered on the AAPI.

The second identified purpose of the AAPI is to facilitate the decision of long term care institutional care. This study did not specifically look at this process; however, the AAPI has shown to have predictive properties for admitting clients to long term institutional care.

The third purpose of the AAPI is to assist in case management. The AAPI fulfils this goal well. It not only provides a comprehensive evaluation, it facilitates discussion of many areas and focuses both the assessor and the client to the areas

of identified need. The case coordinator and the client are able to negotiate a care plan based on the AAPI findings.

The individuals not admitted were of category D, which is that the client and family can manage the care. There may have been a secondary coding that was initially coded but not used within this study. For example, the participants may also have had Code I which is that the home care program had insufficient resources. No clients within this study had Code D and Code I.

In this study, a significant number of clients were admitted to home care one year after their initial non-admission assessment. Further examination of this is warranted. One reason may be that due to the fiscally prudent attitudes of the case coordinators, many clients may not be admitted to home care that could be benefitting from the service. Some individuals may only resort to home care when they are in a crisis state and recognize that they cannot manage any longer. Those individuals stating that they can manage their own care may be encouraged to do so by the case coordinator, in accordance with the home care objective of client autonomy and individual choice. The AAPI does not appear to dictate whether or not the client should be admitted to home care or not. The initial intent of the AAPI was not to discriminate between groups, but only to describe those being assessed. The AAPI helps to lead the case coordinator in the decision-making process of case management. The case coordinator takes into account not only the data from the AAPI, but also the client's and family's needs and wishes, as well

as input from the multidisciplinary team. If the AAPI were to be used for dictating admission criteria, it would need to be validated for its predictiveness and would need to be compared to other instruments that are used for prediction in long term care.

Future Research Implications

The results of this research has provided preliminary data which may be used for future studies. This study focused only on long term care; future studies could examine the same research questions, but within the home care groupings of palliative and acute care. Also, other reasons for not admitting the client could be examined, such as requiring service not provided by home care, requiring care beyond the home care mandate, the individual refusing services, or the home care program having insufficient resources. Further studies could lead to establishing admission criteria or establishing a system for prioritizing admissions.

The specific measures of the AAPI could be examined in those that were institutionalized one year after assessment. Although this area was statistically significant when comparing between groups, further sampling to attain a larger sample (greater than six) may reveal more detail of the areas on the AAPI that predict institutionalization.

Examining individuals admitted to institutions from home care could help determine what factors lead to institutionalization. Health promotion in the form

of educational or preventative measures could be an area of home care service studied for its effectiveness.

Other areas that are not measured on the AAPI may be significant to the findings and warrant measurement such as life satisfaction, life changes, locus of control, activity patterns, patterns of motivation and handling stress (Horgan, 1987). Helberg (1994) showed that a greater frequency of home visits were made to those that had limitations in ADL. The home care provider may have a question of whether or not the individual is safe at home, for example within both basic and instrumental ADL and thus, a future study could examine the service provision related to specified limitations.

In previous decades, the process of health care services was used in measurement of quality control; health care now has moved to a focus of outcome measurement for total quality improvement. Each of the areas that have been studied could lead to outcome measures by comparing the data on the AAPI prior to and post-intervention. If the AAPI is deemed discriminant and sensitive to measure the constructs that are important within long term care, it in itself could be computerized and used as an outcome measure for long term care.

Social support is a complex concept that is difficult to objectively and clearly measure the influence of it on health outcomes (Weinberger, Hiner, & Tierney, 1987). Interventions with the older population need to focus on factors or events that have the most adverse effect (Steinbach, 1992). This could take on

the form of seniors centers programming, strengthening of existing relationships in those who live alone, and decreasing the fragmentation of services. The literature states that in the area of informal support, a greater number of individuals who live with others perceive that if they became sick or had an emergency, they would have someone to call and care for them. Also, spouses of those married act as care providers, thus maintaining the person at home rather than seeking admission to an institution (Dwyer, et al., 1994). This was not addressed in this study but warrants further investigation.

Limitations of the Study

This study was confined to Edmonton Home Care Program clients. If generalizations are to be made to other populations, the closest generalization would be to a similar urban population with a similar home care program. As this is a description of the Edmonton Board of Health - Home Care Program for the specified years, the results may vary with other health units as a result of staffing, policies, referral practices, and admission criteria for that locale.

It is assumed that because the raters have attended and successfully completed the standardized AAPI training workshop all documentation was reliable. Accuracy of the data collected is dependent on the accuracy and completeness of the data reported by these assessors. The AAPI contains other information that was not used in this study. Items not used may be significant and relevant to this study

but not examined. It is assumed that data gathered for a full one year period captured the progression of program changes and that the seasonal and fiscal differences were accounted for.

The group not admitted may be biased towards those who have a higher functional status, as the reason for not admitting them was that they felt that they or an informal care provider could manage the care. However, this does not seem likely because a large proportion of those not admitted were in fact admitted one year later. Also, this retrospective study only reported what happened at that given time and may not be indicative of present day status in home care due to the mandate changes and growth of home care since that date.

Conclusion

The AAPI was developed for the purpose of providing evaluation and placement recommendations for individuals applying for long term care. Since its development, only one published study had examined its reliability and no study had examined its validity. This study examined the AAPI's discriminative validity when used with elderly home care clients and looked at the location of the individual one year after the initial assessment.

The results from this study provide a starting point for understanding the use of specific measures on the AAPI in relation to establishing admission criteria for

home care. As our body of knowledge in this area expands, it will be useful to not only establish admission criteria for home care but also expand program planning and decision making within the continuum of long term care.

The results of this study show that the AAPI measures do not appear to discriminate between those admitted to home care and those not admitted, with the exception of medication management. Therefore, the AAPI, in its current form should not be used alone to establish admission criteria to home care. The results suggest that a client's admission to home care is related to several factors beyond just the measures of the AAPI. More research is required to understand these factors.

The AAPI continues to be a tool that provides a comprehensive description of the client and can be used with confidence by case coordinators for this descriptive purpose. It also continues to be a tool that facilitates the case management process. The AAPI provides an outline for the assessment process and helps to identify the client's needs. From the information gathered on the AAPI, the care plan is negotiated between the client and the case coordinator. The service implementation and monitoring are also guided by the data recorded on the AAPI. It is apparent from the increasing number of people who will need care in the future, home care will be a service that will be used and relied upon. Along with the many changes that have occurred in home care in Alberta in the last decade, evaluation of functional independence continues to be of utmost

importance in determining the client's ability to remain at home in the community. This study has indicated that many individuals that are not initially admitted to home care are admitted within the next consecutive year. This indicates that more home care service should be provided to serve those that indicate the need; to do this funding allocation must be appropriated. Home care resources must be available and accessible in order to optimize program efficiency and meet the home care need.

REFERENCES

- Alberta Government. (1988). A new vision for long term care: Meeting the need. Edmonton: author.
- Alberta Health. (1989). Alberta assessment and placement instrument for long term care: Reference manual. Edmonton: author.
- Alberta Health. (1990). Single point of entry for long term care services in Alberta. Edmonton: author.
- Alberta Health. (1991). Home care: 1991 and beyond. Edmonton: author.
- Alberta Health. (1992a). Alberta's home care program. Edmonton: author.
- Alberta Health. (1992b). Home care in Alberta: New directions in community support. Edmonton: author.
- Alberta Health. (1992c). Self managed care pilot project. Edmonton: author.
- Alberta Health. (1993a). Assessment training. Edmonton: author.
- Alberta Health. (1993b). Self-managed care. Edmonton: author.
- Albrecht, M. (1991). Home health care: Reliability and validity testing of a patient-classification instrument. Public Health Nursing, 8(2), 124-131.

- Albrecht, M., & Perry, K. (1992). Home health care: Delineation of research priorities and formation of a national network group. Clinical Nursing Research, 1(3), 305-311.
- Anderson, E. (1982). Standardization of the assessment process in a decentralized service delivery system. The Gerontologist, 22(Scientific Meeting Supplement), 63.
- Bernstein, L. (1992). A public health approach to functional assessment. Caring Magazine, December, 32-38.
- Bloom, J. (1990). A relationship of social support and health. Social and Scientific Medicine, 30(5), 635-637.
- Branch, L. & Jette, A. (1982). A prospective study of long term care institutionalization among the aged. American Journal of Public Health, 72, 1373-1378.
- Branch, L., Jette, A., Evashwick, L., Polasky, M., Row, G., & Diehr, P. (1981). Toward understanding elder's health service utilization. Journal of Community Health, 7(2), 80-92.
- Butin, D. (1991). Helping those with dementia to live at home: An educational series for caregivers. The Mentally Impaired Elderly, 69-82.
- Chappell, N. (1985). Social support and the receipt of home care services. The Gerontologist, 25, 47-53.

- Choi, T. , Jolsten, L., & Christiansen, M. (1993). Health-specific family coping index for noninstitutional care. American Journal of Public Health, 73(11), 1275-1277.
- Cohen, J. (1977). Statistical power analysis for the behavioral sciences. NY: Academic Press.
- Conn, V. (1991). Older adults: factors that predict the use of over-the-counter medication. Journal of Advanced Nursing, 16, 1190-1196.
- Cooper, J., Love, D. & Raffoul, P. (1982). Intentional prescription nonadherence by the elderly. Journal of the American Geriatrics Society, 30(5), 329.
- Cox, C., Spiro, M., & Sullivan, J. (1988). Social risk factors: Impact on elder's perceived health status. Journal of Community Health Nursing, 5(1), 59-73.
- D'Arcy, C. (1987). Aging and mental health. In V. Marshall (Ed.), Aging in Canada: Social perspectives (2nd ed.). (pp. 424-450). ON: Fitzhenry & Whiteside.
- Dellasega, C. & Stricklin, M. (1993). Cognitive impairment in elderly home health clients. Home Health Care Services Quarterly, 14(1), 81-92.
- Disler, P., Roy, C., & Smith, B. (1993). Predicting hours of care needed. Archives of Physical Medicine and Rehabilitation, 74, 139-143.
- Doty, P. (1986). Family care of the elderly: The role of public policy. The Milbank

Quarterly, 64, 34-75.

Duffy, M. & MacDonald, E. (1990). Determinants of functional health of older persons. The Gerontologist, 30(4), 503-509.

Dwyer, J., Barton, A., & Vogel, W. (1994). Area of residence and the risk of institutionalization. Journal of Gerontology, 49(2), S75-84.

Eakin, P. (1989). Assessments of activities of daily living: A critical review. British Journal of Occupational Therapy, 52(1), 11-15.

Edmonton Board of Health - Home Care Program. (1993). Self managed care. Edmonton: author.

Edwardson, S. & Nardone, P. (1990). The dependency at discharge instrument as a measure of resource use in home care. Public Health Nursing, 7(3), 138-144.

Esposito, L. (1992). Medication knowledge and compliance: Home care vs. senior housing clients. Caring, 11(11), 42-45.

Folstein, M., Folstein, S., & McHugh, P. (1975). Mini-mental state: A practical method for grading the cognitive state of patients for the clinician. Journal of Psychiatric Research, 12, 189-198.

Frederiks, C. M., Wierik, M. J., Visser, A. P., & Sturmans, F. (1991). A scale for the functional status of the elderly living at home. Journal of Advanced

Nursing, 16, 287-292.

Glick, D. (1994). The relationship between demographic characteristics and nursing problems in home health care. Public Health Nursing, 11(4), 259-267.

Granger, C. (1993). Functional assessment in stroke. Archives in Physical Medicine and Rehabilitation, 74, 133-138.

Greene, V. & Ondrich, J. (1984). Risk factors for nursing home admissions and exits: A discrete time hazard function approach. Journal of Gerontology, 45, S250-258.

Hanley, R., Alexih, L., Weiner, J., & Kennell, D. (1990). Predicting elderly nursing home admissions. Research on Aging, 12, 199-228.

Health and Welfare Canada. (1986). A framework for the development of home care in Canada: A report of the federal-provincial-territorial subcommittee on long term care. Ottawa: author.

Health and Welfare Canada: Federal/Provincial/Territorial/Working Group on Home Care. (1990). Report on home care. Ottawa: author.

Health and Welfare Canada. (1992a). Classification of long term care clients in home care: Proposal for the development of a national framework. Ottawa, author.

Health and Welfare Canada. (1992b). An exploratory study of private home care

services in Canada. Ottawa, author.

Helberg, J. (1993). Patient's status at home care discharge. Image: Journal of Nursing Scholarship, 25(2), 93-99.

Helberg, J. (1994). Use of home care nursing resources by the elderly. Public Health Nursing, 11(2), 104-112.

Horgan, P. (1987). Health status perceptions affect health related behaviours. Journal of Gerontological Nursing, 13(12), 30-33.

Iversen, I., Silberberg, N., Stever, R., & Schoening, H. (1973). The revised Kenny self-care evaluation: A numerical measure of independence in activities of daily living. Sister Kenny Institute, Minneapolis, MN

Katz, S. & Akpom, C. (1976). Index of ADL. Medical Care, 14, 116-118.

Kempen, G., & Suurmeijer, P. (1991). Factors influencing professional home care utilization among the elderly. Social Science and Medicine, 32(1), 77-81.

Kerkstra, A., & Vorst-Thijssen, T. (1991). Factors related to the use of community nursing services in the Netherlands. Journal of Advanced Nursing, 16, 47-54.

Lamy, P. (1989). Non-prescription drugs and the elderly. Family Physician, 29(6), 175-179.

Magaziner, J., & Cadigan, D. (1989). Community care of older women living

alone. Women in Later Years, 121-138.

Magnani, L. (1990). Hardiness, self-perceived health, and activity among independently functioning older adults. Scholarly Inquiry for Nursing Practice: An International Journal, 4(3), 171-183.

Mahoney, F. & Barthel, D. (1965). Functional evaluation: The Barthel index. Md State Medical Journal, 14, 61-65.

Martin Matthews, A. (1987). Widowhood as an expectable life event. In V. Marshall (Ed.), Aging in Canada: Social perspectives (2nd ed.). (pp.343-367). ON: Fitzhenry & Whiteside.

McDowell, I., & Newell, C. (1987). Measuring health: A guide to rating scales and questionnaires. NY: Oxford University Press.

McKenzie, D., Capuzzi, C., & Will, S. (1989). Alberta assessment and placement instrument: Description and interrater reliability. Medical Care, 27(10), 937-941.

Ostrom, J., Hammerlund, R., Christensen, D., Plein, J., Kethley, A. (1985). Medication usage in an elderly population. Medical Care, 23(2), 157-164.

Payton, O. (1993). Research: The validation of clinical practice (3rd ed.). PA: FA Davis Co.

Pearlman, D. & Crown, W. (1992). Alternative sources of social support and their

impacts on institutional risk. The Gerontologist, 32(4), 527-535.

Province of Alberta. (1991). Public health act: Coordinated home care program regulation. Edmonton, author.

Saba, V., & Zuckerman, A. (1992). A new home health classification method. Caring Magazine, October, 27-34.

Schwenger, C. (1987). Formal health care for the elderly in Canada. In V. Marshall (Ed.), Aging in Canada: Social perspectives (2nd ed.). (pp. 505-519). ON: Fitzhenry & Whiteside.

Seniors Advisory Council for Alberta. (1991). Older Albertans: 1990. Edmonton: author.

Shapiro, E., & Roos, N. (1987). Predictors, patterns, and consequences of nursing home use in one Canadian province. In V. Marshall (Ed.), Aging in Canada: Social perspectives (2nd ed.). (pp. 520-537). ON: Fitzhenry & Whiteside.

Shapiro, E., & Tate, R. (1985). Predictors of long term care facility use among the elderly. Canadian Journal on Aging, 4(1), 11-19.

Sidel, V., Beizer, J., Lisi-Fazio, D., Kleinmann, K., Weston, J., Thomas, C., & Kelman, H. (1990). Controlled study of the impact of educational home visits by pharmacists to high-risk older patients. Journal of Community Health, 15(3), 163-174.

- Simmons-Tropea, D., & Osborn, R. (1987). Disease, survival, and death: The health status of Canada's elderly. In V. Marshall (Ed.), Aging in Canada: Social perspectives (2nd ed.). (pp. 399-423). ON: Fitzhenry & Whiteside.
- Spector, W. (1991). Cognitive impairment and disruptive behaviours among community-based elderly persons: Implications for targeting long term care. The Gerontologist, 31(1), 51-59.
- SPSS Inc. (1993). Statistical Package for the Social Sciences (computer program). Chicago, IL: SPSS Inc.
- Statistics Canada. (1991). Survey on Ageing and Independence. On: Author.
- Steinbach, U. (1992). Social networks, institutionalization and mortality among elderly people in the United States. Journal of Gerontology, 47(4), S183-190.
- Stone, L., & Fletcher, S. (1987). The hypothesis of age patterns in living arrangement passages. In V. Marshall (Ed.), Aging in Canada: Social perspectives (2nd ed.). (pp. 288-310). ON: Fitzhenry & Whiteside.
- Van Rossum, E., Frederiks, C., Philipsen, H., Pertengen, K., Wiskerke, J. & Knipschild, P. (1993). Effects of preventative home visits to elderly people. British Medical Journal, 307, 27-32.
- Van Rossum, E. (1993). Effects of preventative home visits to the elderly. Netherlands: author.

- Weinberger, M., Darnell, J., Tierney, W., Martz, B. Hiner, S., Barker, J., Neill, P. (1986). Self-rated health as a predictor of hospital admission and nursing home placement in elderly public housing tenants. American Journal of Public Health, 76(4), 457-459.
- Weinberger, M., Hiner, S. & Tierney, W. (1987). Assessing social support in elderly adults. Social and Scientific Medicine, 25(9), 1049-1055.
- Weintraub, M. (1990). Compliance in the elderly. Clinics in Geriatric Medicine, 6(2), 445-52.
- Williamson, J., & Chopin, J. (1980). Adverse reactions to prescribed drugs in the elderly: A multi-center investigation. Age and Aging, 9, 73.
- Worall, G., & Moulton, N. (1993). Cognitive function: Survey of elderly persons living at home in rural Newfoundland. Canadian Family Physician, 39, 772-777.

APPENDIX A

Background History of Home Care in Alberta

In July, 1978, home care in Alberta was legislated under the Public Health Act through the Coordinated Home Care Program Regulation of Alberta Health and delivered by 27 health units (Alberta Health, 1993b). In 1984, palliative care and support services were expanded to include provision of support services (when it was the only need) to clients aged 65 years or older (Alberta Health, 1992a). A "Single Point of Entry" model came into effect in Alberta in 1990 to provide individuals requiring long term care with a single access point to health and support services (Alberta Health, 1990). The guiding principle of this model is that community-based resources are to be explored first, prior to institutional care. This model is based on the premise that clients will remain independent and continue to manage within the family and community environment (Alberta Health, 1992b). Individuals who cannot have their needs met in the community may then be considered for institutional care (Alberta Health, 1991). Effective on July 1, 1991, Albertans of any age who had an assessed need for professional health services, home support services, or both became eligible for admission to the home care program (Alberta Health, 1991).

In 1991, clients of both Handicapped Children's Services and Supports for Independence were phased in under the auspices of home care (Alberta Health, 1991). In 1992, the Alberta Home Care Program completed a successful pilot project on Self Managed Care at four Alberta health units (Alberta Health, 1992c). In 1993, this option became available across the province as a choice for all eligible clients (Edmonton Board of Health - Home Care Program, 1993). Under this option, monies are provided directly to clients to purchase support services to meet their assessed needs. This option respects an individual's right to make choices and decisions while taking on the responsibility for his or her care (Alberta Health, 1992c).

APPENDIX B

The Objectives of the Alberta Home Care Program

The Alberta Home Care Act outlines eight main **objectives**. The first objective is to coordinate the provision of home care services in order to improve, maintain, or retard deterioration of health status and level of independence, reduce admissions to health care institutions, or facilitate early discharge of people in health care facilities thereby reducing their length of stay. A second objective is to develop, maintain and upgrade standards of care to provide services in an efficient, effective and humane manner. The third objective is to have the program available and consistent throughout the province. The fourth objective is to increase the capacity of families and other informal support networks to provide care for persons in need. The fifth objective is to promote cooperation among health and social services agencies in the community so that services for home care recipients and referrals are efficient, effective, and timely, and that community services are not unnecessarily duplicated. The sixth objective is to involve volunteers in the provision of home care services. The seventh objective is to advise decision-makers on program changes needed to meet the needs of client groups and, lastly, the eighth objective is to determine the extent to which the program's objectives are being met (Province of Alberta, 1991).

APPENDIX C

THE ALBERTA ASSESSMENT

AND

PLACEMENT INSTRUMENT

ALBERTA
ASSESSMENT AND
PLACEMENT INSTRUMENT
FOR LONG TERM CARE





ASSESSMENT AND PLACEMENT INSTRUMENT FOR LONG TERM CARE

ASSESSMENT DATES

1 **2** **3**

PART ONE

REQUEST FOR SERVICE

APPLICANT IDENTIFICATION NUMBER

1A APPLICANT IDENTIFICATION

NAME LAST FIRST MIDDLE INITIAL(S) MAIDEN NAME

PERMANENT ADDRESS

CURRENT ADDRESS

POSTAL CODE

PHONE NUMBER

POSTAL CODE

PHONE NUMBER

DATE OF BIRTH

AGE

SEX

RELIGION (OPTIONAL)

MARITAL STATUS

☐ SINGLE☐ MARRIED☐ SEPARATED☐ DIVORCED☐ WIDOWED☐ OTHER (SPECIFY)

LANGUAGE

SPOKEN

PREFERRED

UNDERSTOOD

UNDERSTOOD PARTIALLY

IS AN INTERPRETER REQUIRED?

☐ YES☐ NO

NAME OF INTERPRETER

PHONE NUMBER

1B IDENTIFICATION NUMBER(S)

AHCIIP

Alberta Blue Cross

Old Age Security

Third Party Billing:

Veteran I.D.

Treaty No.

Other Health Ins.

Other

YES

NO

ADDITIONAL INCOME

☐☐☐☐☐☐☐☐

Guaranteed Income Supplement

Alberta Assured Income Supplement

Social Allowance

Widow's Pension

Worker's Compensation

Other

Other

1C NEXT OF KIN

EMERGENCY CONTACT

NAME

NAME

ADDRESS

ADDRESS

POSTAL CODE

POSTAL CODE

RES. PHONE

BUS. PHONE

RES. PHONE

BUS. PHONE

RELATIONSHIP

RELATIONSHIP

1D REFERRAL DATA

REFERRAL DATE REASON FOR REFERRAL

SOURCE OF REFERRAL

☐ PHYSICIAN☐ SELF☐ FAMILY☐ HEALTH CARE WORKER☐ INSTITUTION☐ AGENCY☐ OTHER (SPECIFY)

NAME OF REFERRAL SOURCE

PHONE NUMBER

REFERRAL TAKEN BY NAME, PROF. TITLE

AGENCY

APPLICANT NEEDS TO BE SEEN WITHIN

☐ 24 HOURS☐ 7 DAYS☐ 14 DAYS☐ 30 DAYS☐ OTHER (SPECIFY)
☐ IS APPLICANT AWARE OF THIS REQUEST FOR SERVICE? ☐ YES ☐ NO ☐ ASSESSMENT 2? ☐ YES ☐ NO ☐ ASSESSMENT 3? ☐ YES ☐ NO

1E PHYSICIAN DATA

PRIMARY PHYSICIAN

OTHER PHYSICIAN

BUS. PHONE

OTHER PHONE

BUS. PHONE

OTHER PHONE

DATE OF APPLICANT'S LAST VISIT

DATE OF APPLICANT'S LAST VISIT

DIAGNOSIS/ES:

1F PLACE OF RESIDENCE

CODES

ACCOMMODATION (Indicate by Code Number)

- * 1. SINGLE FAMILY DWELLING
- * 2. APARTMENT/MULTI-FAMILY DWELLING
- * 3. ROOM ONLY
- * 4. LODGE
- * 5. GROUP HOME
- 6. LONG TERM CARE FACILITY
- 7. ACTIVE TREATMENT HOSPITAL
- 8. REHABILITATION FACILITY
- 9. MENTAL HEALTH FACILITY
- 10. OTHER

ASSES. 1 ASSES. RES. 1 USUAL RES. 1
 ASSES. 2 ASSES. RES. 2 USUAL RES. 2
 ASSES. 3 ASSES. RES. 3 USUAL RES. 3

INDICATE TOTAL NO. OF RESIDENTS, INCLUDING APPLICANT, IN USUAL RESIDENCE. DO NOT INCLUDE LODGE RESIDENTS.

1
2
3

* If applicant's Usual Res is 1, 2, 3, 4, or 5 then check appropriate:

- ☐ ALONE ☐ WITH SPOUSE AND OTHERS ☐ WITH OTHER FAMILY
☐ WITH SPOUSE ONLY ☐ WITH OTHERS ONLY ☐ OTHER

1G POWER OF ATTORNEY

IF APPLICABLE

NAME

ADDRESS

POSTAL CODE

RES. PHONE

BUS. PHONE

RELATIONSHIP

GUARDIANSHIP☐ LEGAL GUARDIAN ☐ NO GUARDIAN ☐ APPLICATION IN PROGRESS

NAME

ADDRESS

POSTAL CODE

RES. PHONE

BUS. PHONE

RELATIONSHIP

TRUSTEESHIP☐ TRUSTEE ☐ NO TRUSTEE ☐ APPLICATION IN PROGRESS

NAME

ADDRESS

POSTAL CODE

RES. PHONE

BUS. PHONE

RELATIONSHIP

OTHER FINANCIALLY RESPONSIBLE

NAME

ADDRESS

POSTAL CODE

RES. PHONE

BUS. PHONE

RELATIONSHIP

1H CONSENT FOR RELEASE OF INFORMATION

I, _____ OF _____

NAME OF APPLICANT

City/Town

authorize _____

NAME OF AGENCY/INSTITUTION

TO

release the information contained in the Alberta Assessment and Placement Instrument for the purpose of sharing information with other health professionals, agencies or institutions involved in the Assessment/Placement process. I am 18 years of age or older.

Dated this _____ day of _____, 19 _____

Witness Name

Applicant or Guardian Signature

Signature

Relationship

PART TWO COMPREHENSIVE HEALTH ASSESSMENT

NAME _____

2A PHYSICAL STATUS**2A1 APPLICANT'S PERCEIVED NEEDS:**

APPLICANT'S PERCEPTION OF NEED(S) AND SOLUTIONS

1. _____

2. _____

3. _____

SOURCES OF INFORMATION1. ☐ Applicant ☐ Family/Friends ☐ Health Records ☐ Health Care Workers ☐ Other: _____2. ☐ Applicant ☐ Family/Friends ☐ Health Records ☐ Health Care Workers ☐ Other3. ☐ Applicant ☐ Family/Friends ☐ Health Records ☐ Health Care Workers ☐ Other**2A2 BASELINE HEALTH DATA**

HEALTH HISTORY

SURGERY (From most recent)	DATE	SURGERY	DATE

BASELINE MEASUREMENTS (Optional)

1	"	R	R	BP	HT	WT	OTHER
2	"	R	R	BP	HT	WT	OTHER
3	"	R	R	BP	HT	WT	OTHER

ALLERGIES AND SENSITIVITIES

CHECK IF

NO KNOWN ALLERGIES

☐
☐
☐

OR

☐ PENICILLIN
☐ SULFONAMIDES
☐ ASPIRIN
☐ OTHER

DRAWN BY: _____

2A4 VISION, HEARING, COMMUNICATION

1. Vision

Last examination in past year	1	2	3	Adequate, normal vision without corrective lenses	1	2	3	0
Between 1-3 years	1	1	1	Adequate, normal vision with corrective lenses	1	1	1	0
• More than 3 years	1	1	1	• Inadequate vision, cannot read news print, medication labels	1	1	1	0
Check if:	1	2	3	• Limited vision, cannot see obstacles/objects in environment/uses hands or cane to navigate	1	1	1	0
Prescription Eyeglasses	1	1	1	• Distinguishes only light/dark	1	1	1	0
Contact Lenses	1	1	1	• Totally blind	1	1	1	0
Eye Prostheses	1	1	1					
Cataracts	1	1	1					
Registered with CNIB	1	1	1					
Other _____	1	1	1					
Comment: 1								
2								
3								

2. Hearing

Last examination in past year	1	2	3	Hears normal speech without aids	1	2	3	0
Between 1-3 years	1	1	1	Hears normal speech with aids	1	1	1	0
• More than 3 years	1	1	1	Hears if speech is slow, direct, and in a loud voice	1	1	1	0
Check if:	1	2	3	• Frequently misunderstands even if speech is slow, direct, and in loud voice	1	1	1	0
Hearing Aid Left	1	1	1	• Unable to hear adequately for most communication, able to hear loud noises	1	1	1	0
Right	1	1	1	• Totally deaf, unable to hear loud noises	1	1	1	0
Comment: 1								
2								
3								

3. Expressive Communication (In own language)

Check if:	1	2	3		1	2	3	0
Aphasic	1	1	1	Able to communicate verbally and be understood	1	1	1	0
Laryngectomy	1	1	1	• Able to communicate verbally, understood with difficulty	1	1	1	0
Language Disorder	1	1	1	• Uses aids to communicate (sign language, symbol board, writes)	1	1	1	0
Receiving Speech Therapy	1	1	1	• Unable to communicate effectively using any means	1	1	1	0
Uses Telephone	1	1	1					
Uses Medical Alert System	1	1	1					
Other _____	1	1	1					
Comment: 1								
2								
3								

4. Receptive Language (in own language)

Check if:	1	2	3	Understands verbal communication	1	2	3	0
Unable to read in English	1	1	1	• Limited understanding of verbal communication	1	1	1	0
Unable to read in own lang.	1	1	1	• Uses lipreading, written materials or structured sign language to understand	1	1	1	0
	1	1	1	• Able to understand only gestures / facial expressions / simple pictures or environmental cues	1	1	1	0
	1	1	1	• Unable to understand	1	1	1	0
Comment: 1								
2								
3								

* Further evaluation recommended

2A5 NUTRITION**1. Dentition/Oral Hygiene**

Last Examination: 1 2 3
 In past year: 1 2 3
 Between 1-3 years: 1 2 3
 More than 3 years: 1 2 3
 Check if:
 Dentures: 1 2 3
 No teeth: 1 2 3
 Mouth Lesions: 1 2 3
 Dry Mouth: 1 2 3
 Other: 1 2 3

No alteration/adequate
 Alteration/does not imply ability to chew:
 Alteration/implies ability to chew:
 Comment:

Dentition			Oral Hygiene		
1	2	3	1	2	3
1	2	3	1	2	3
1	2	3	1	2	3

2. Diet/Hydration

Check if:
 Special Diet: 1 2 3
 Tube Feeding: 1 2 3
 Parenteral Therapy: 1 2 3
 Appetite Change: 1 2 3
 Weight Change: 1 2 3
 Dehydration: 1 2 3
 Tendency to Choke: 1 2 3
 Difficulty Swallowing: 1 2 3
 Other: 1 2 3

24 Hour Recall: Typical Food Intake Pattern (optional): 1 2 3

Adequate Diet/Fluid Intake
 Special Diet/Compliant
 Inadequate Diet and/or Noncompliant

Diet			Hydration		
1	2	3	1	2	3
1	2	3	1	2	3
1	2	3	1	2	3

Comment: 1
 2
 3

2A6 TISSUE AND SKIN INTEGRITY

Check if:
 Dryness: 1 2 3
 Rash: 1 2 3
 Edema: 1 2 3
 Bruising: 1 2 3
 At Risk For Breakdown: 1 2 3
 Ulcer: 1 2 3
 Lacerations: 1 2 3
 Wound: 1 2 3
 Infection: 1 2 3
 Other: 1 2 3

Site/Treatment:

No alteration
 Alteration: manages care independently
 Able to manage with assistance to set up
 Able to manage with some supervision:
 assistance: significant participation
 Unable to manage, needs constant
 supervision/assistance

1	2	3	1	2	3
1	2	3	1	2	3
1	2	3	1	2	3
1	2	3	1	2	3
1	2	3	1	2	3

Tissue/Skin Management

Comment:

Check if:
 Dressing Unstene: 1 2 3
 Dressing Stene: 1 2 3
 Irrigation: 1 2 3
 Hydrotherapy: 1 2 3
 Wound Packing: 1 2 3
 Other: 1 2 3

1
 2
 3

2A7 ELIMINATION

Elimination				Urinary				Bowel			
Check if:	1	2	3		1	2	3		1	2	3
• Constipation				No alteration							
• Diarrhea				Alteration: manages care independently							
• Stress Incontinence				Able to manage with assistance to set up							
• Urinary Incontinence				Able to manage with some supervision							
• Bowel Incontinence				assistance: applicant participates							
• Chronic Urinary Infection				Unable to manage: needs constant supervision/assistance							
• Chronic Urinary Retention											
Other: _____											

Urinary/Bowel Management

	1	2	3	Comment:
Bladder Routine				_____
Bowel Routine				_____
Incontinence Supplies				_____
Involving Urethral Catheter				_____
Suprapubic Catheter				_____
Cystostomy				_____
Ileostomy				_____
Ureterosomy				_____
Other: _____				_____

2A8 COMFORT/DISCOMFORT

1. Pain				Acute				Chronic			
Check if:	1	2	3	Site	1	2	3	Site			
• Occasional				_____				_____			
• Frequent				_____				_____			
• Daily				_____				_____			
• Continuous				_____				_____			

Pain Management

Acute				Chronic				No pain/discomfort			
Check if:	1	2	3	1	2	3	1	2	3		
Oral Meds											
Injections											
T.E.N.S.											
Wax											
Heat/Cold											
Soaks											
Other: _____											

Has pain/does pain management activities independently: _____

Has pain/able to manage with assistance to set up: _____

Able to manage pain management activities with some supervision/assistance: applicant participates: _____

Unable to manage: needs constant supervision/assistance with pain management activities: _____

Check if pain management satisfactory: Yes _____ No _____

2. Sleep

Check if:				Adequate sleep pattern			
1	2	3		1	2	3	
• HS Sedation				Occasional disturbance in sleep pattern: special treatment or intervention not required			
Bedtime Routine				Frequent disturbances of sleep pattern: does not interfere with ability to participate in daily activities			
Other: _____				Frequent or continuous sleep disturbances: may disrupt others' ability to function safely			

Comment: _____

2A9 RESPIRATION

Check if:	1	2	3
Shortness of Breath	☐	☐	☐
C.O.P.D.	☐	☐	☐
Emphysema	☐	☐	☐
Asthma	☐	☐	☐
Repeated Pneumonia	☐	☐	☐
Tuberculosis	☐	☐	☐
Other _____	☐	☐	☐

No alteration	☐	☐	☐
Alteration: Manages care independently	☐	☐	☐
Able to manage with assistance to set up	☐	☐	☐
Able to manage with some supervision/assistance: applicant participates	☐	☐	☐
Unable to manage, needs constant supervision/assistance	☐	☐	☐

Management of Respiratory Care

Check if:	1	2	3
Monitoring	☐	☐	☐
Aerosol Therapy/Nebulization	☐	☐	☐
Humidity Therapy	☐	☐	☐
Medication Inhaler	☐	☐	☐
Oxygen Therapy	☐	☐	☐
Ventilation/Respiration	☐	☐	☐
Tracheostomy	☐	☐	☐
Postural Drainage/Perfusion	☐	☐	☐
Deep Breathing & Coughing	☐	☐	☐
Oral/Tracheal Suctioning	☐	☐	☐
Other _____	☐	☐	☐

Comment:

1 _____

2 _____

3 _____

2A10 CIRCULATION

Check if:	1	2	3
Pulse Irregularities	☐	☐	☐
Shortness of Breath	☐	☐	☐
Dependent Edema	☐	☐	☐
Hypertension	☐	☐	☐
Angina	☐	☐	☐
Other _____	☐	☐	☐

No alteration	☐	☐	☐
Alteration: Manages care independently	☐	☐	☐
Able to manage with assistance to set up	☐	☐	☐
Able to manage with some supervision/assistance: applicant participates	☐	☐	☐
Unable to manage, needs constant supervision/assistance	☐	☐	☐

Management of Circulatory Care

Check if:	1	2	3
Monitoring	☐	☐	☐
Activity Restrictions	☐	☐	☐
Thromboembolic Stockings	☐	☐	☐
Positioning	☐	☐	☐
Other _____	☐	☐	☐

Comment:

1 _____

2 _____

3 _____

Discriminator		
Date Checked		Rate
1		
2		
3		

2A11 PHYSICAL FUNCTION

Check if:	1	2	3	Site	Management of Alterations in Physical Function	1	2	3
Hemiplegia					Check if:			
Paraplegia					Treatment			
Quadruplegia					Wax Bams			
Fracture					Cold/Heat/Hot Packs			
Amputation					Gait Training			
Limited Joint R.O.M.					Exercise Program			
Contractures					Safety Assessment Training			
Weakness					Energy Conservation			
Limited Muscle Strength					Joint Protection Techniques			
Low Activity Tolerance					Other _____			
Altered Proprioception								
Impaired Sensation								
Abnormal Muscle Tone								
Impaired Fine Motor Coord.								
Impaired Gross Motor Coord.								
Tremors								
Ataxia								
Rigidity								
Impaired Sitting Balance								
Impaired Standing Balance								
Other _____								

Comment:

2A12 ACTIVITIES OF DAILY LIVING

Equipment/Treatment Presently Used

Check if: Contraindicated

	1	2	3	Specify
Eating Aids				
Dressing Aids				
Grooming Aids				
Bathing Aids				
Toileting Aids				
Walking Aids				
Wheelchair				
Orthotics/Prosthesis				
Mechanical Lift				
Meal Prep. Aids				
Other _____				
Occupational Therapy				
Physiotherapy				

Comment:

* Further evaluation recommended

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2A12A PERSONAL CARE

	EATING			DRESSING			GROOMING			BATHING			TOILETING			HAND CARE			FOOT CARE		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Independent:																					
Independent with Special Devices:																					
Able to manage with assistance to set up:																					
Able to manage with some sup. assistance; applicant participates:																					
Unable to manage; needs constant sup./assistance of one person:																					
Unable to manage; needs constant sup./assistance of two persons:																					

Comments:

2A12B MOBILITY

	INDOOR MOBILITY			OUTDOOR MOBILITY			STAIRS/RAMPS			TRANSFER			TRANSPORT		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Independent:															
Independent with Equipment:															
Able to manage with assistance to set up:															
Able to manage with some supervision/assistance for safety and encouragement; applicant participates:															
Unable to manage; needs constant supervision/assistance of one person:															
Unable to manage; needs constant supervision and/or physical support of two persons:															

Comments:

2A12C ACTIVITIES OF HOUSEHOLD MANAGEMENT

	SHOPPING	BANKING & MONEY MANAGEMENT	FILE & FORMS	MEAL PREPARATION	HOUSE CLEANING LAUNDRY	REPAIRS YARDWORK
	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Independent in all aspects of task						
Independent with aids/equipment						
Able to manage with assistance to set up						
Able to manage with some supervision/assistance						
Unable to manage, needs constant supervision/assistance, someone else must perform the task						

Comments

Additional Comments

2B MENTAL STATUS

Note to Assessor: Check if applicant is comatose: 1 = 1 2 = 2 3 = 3 If comatose continue to Section 2D.

2B1 AWARENESS

	1	2	3	Check Re: Onset / Change	1	2	3
Consistently responsive	—	—	3	• New symptom within last 3 months	—	—	—
Reduced awareness but person able to shift focus and sustain attention to environmental stimuli	—	—	2	• Deterioration from previous status	—	—	—
• Fluctuating awareness, person unable to consistently shift focus and sustain attention to environmental stimuli	—	—	1	Chronic but stable over time	—	—	—
• Consistently unresponsive due to extreme restlessness or apathy	—	—	1				
Comment: 1							
2							
3							

2B2 ORIENTATION

	1	2	3	Check Re: Onset / Change	1	2	3
Oriented to person, place and time	—	—	3	• New symptom within last 3 months	—	—	—
• Oriented to person and place, but not time	—	—	2	• Deterioration from previous status	—	—	—
• Oriented to person, but not place or time	—	—	1	Chronic but stable over time	—	—	—
• Disoriented to person, place and time	—	—	1				
Comment: 1							
2							
3							

2B3 MEMORY

	1	2	3	Check Re: Onset / Change	1	2	3
Immediate, recent and remote memory intact	—	—	3	• New symptom within last 3 months	—	—	—
• Immediate and recent memory impaired, remote memory generally intact	—	—	2	• Deterioration from previous status	—	—	—
• Immediate and recent memory impaired, some impairment in remote memory	—	—	1	Chronic but stable over time	—	—	—
• Significant impairment in immediate, recent and remote memory	—	—	1				
Comment: 1							
2							
3							

2B4 JUDGEMENT & DECISION MAKING ABILITY

	1	2	3	Check Re: Onset / Change	1	2	3
Perceptions, concentration, judgements, decision-making logically related to events, circumstances (ie: reality based)	—	—	3	• New symptom within last 3 months	—	—	—
Occasionally impaired or inappropriate perceptions, concentration, judgements, decision-making based on apparent misinterpretation of specific circumstances or events (ie: denial or of excess importance given to specific events and/or circumstances)	—	—	2	• Deterioration from previous status	—	—	—
• Consistently impaired perceptions, concentration, judgements, or decision-making	—	—	1	Chronic but stable over time	—	—	—
Comment: 1							
2							
3							

2C PSYCHOSOCIAL STATUS

Note to Assessor: If a symptom is present, comment on the intervention(s) used to manage the symptom after the appropriate section, i.e. verbal intervention, surveillance, environmental, medications, other.

2C1 ANXIETY

- Anxious behavior not apparent
 Symptoms present; will participate in activities without support
 Symptoms present; requires encouragement, supervision to participate in or complete activities
 Symptoms present; immobilized, unable to participate or cooperate in activities

	1	2	3
Anxious behavior not apparent	1	2	3
Symptoms present; will participate in activities without support	1	2	3
Symptoms present; requires encouragement, supervision to participate in or complete activities	1	2	3
Symptoms present; immobilized, unable to participate or cooperate in activities	1	2	3

Check Re: Onset / Change

- New symptom within last 3 months
 • Deterioration from previous status
 Chronic but stable over time

	1	2	3
New symptom within last 3 months	1	2	3
Deterioration from previous status	1	2	3
Chronic but stable over time	1	2	3

Comment/
 intervention

2C2 DEPRESSION

Check if: Recent identifiable loss
 identifiable loss imminent

	1	2	3
Recent identifiable loss	1	2	3
identifiable loss imminent	1	2	3
Depression not apparent	1	2	3
Symptoms present; will participate in activities without support	1	2	3
Symptoms present; requires encouragement, supervision to participate in or complete activities	1	2	3
Symptoms present; unable to participate or cooperate in activities	1	2	3

Check Re: Onset / Change

- New symptom within last 3 months
 • Deterioration from previous status
 Chronic but stable over time

	1	2	3
New symptom within last 3 months	1	2	3
Deterioration from previous status	1	2	3
Chronic but stable over time	1	2	3

Comment/
 intervention

2C3 SUICIDE IDEATION

Check if: Past history of suicide attempts

	1	2	3
Past history of suicide attempts	1	2	3
Suicidal behavior not apparent	1	2	3
Verbalizes ideas of suicide, no prior threats or attempts	1	2	3
Verbalizes ideas of suicide, history of prior threats or attempts	1	2	3
Verbalizes plans for suicide	1	2	3
Has attempted suicide recently	1	2	3

Check Re: Onset / Change

- New symptom within last 3 months
 • Deterioration from previous status
 Chronic but stable over time

	1	2	3
New symptom within last 3 months	1	2	3
Deterioration from previous status	1	2	3
Chronic but stable over time	1	2	3

Comment/
 intervention

2C4 SUSPICIOUSNESS/PARANOIDA

- Suspiciousness/Paranoia not apparent
 Occasionally suspicious of unfamiliar persons
 Suspicious of most others, including family members, but behavior does not disrupt routine
 Suspicious of most others, interferes with daily routine

	1	2	3
Suspiciousness/Paranoia not apparent	1	2	3
Occasionally suspicious of unfamiliar persons	1	2	3
Suspicious of most others, including family members, but behavior does not disrupt routine	1	2	3
Suspicious of most others, interferes with daily routine	1	2	3

Check Re: Onset / Change

- New symptom within last 3 months
 • Deterioration from previous status
 Chronic but stable over time

	1	2	3
New symptom within last 3 months	1	2	3
Deterioration from previous status	1	2	3
Chronic but stable over time	1	2	3

Comment/
 intervention

• Further Evaluation Recommended

2C5 AGITATION

	1	2	3	Check Re: Onset / Change	1	2	3
Agitated behavior not apparent	—	—	—	0	• New symptom within last 3 months	—	—
Restlessness, pacing, incessant talking only in response to major changes in routine	—	—	—	1	• Deterioration from previous status	—	—
• Restlessness, pacing, incessant talking in response to minor changes in routine	—	—	—	2	Chronic but stable over time	—	—
• Restlessness, pacing, incessant talking without identifiable stressor	—	—	—	3		—	—
Comment:	1						
Intervention:	2						
	3						

2C6 AGGRESSION

	1	2	3	Check Re: Onset / Change	1	2	3
Aggressive behavior not apparent	—	—	—	0	• New symptom within last 3 months	—	—
• Exhibits hostility, argues, is verbally abusive either spontaneously or when approached or touched	—	—	—	1	• Deterioration from previous status	—	—
• Strikes out physically when approached or touched by others	—	—	—	2	Chronic but stable over time	—	—
• Initiates contact with others in order to vent hostility, anger, verbal abuse	—	—	—	3		—	—
• Initiates contact with others in order to strike out physically	—	—	—	4		—	—
Comment:	1						
Intervention:	2						
	3						

2C7 HOARDING, RUMMAGING

	1	2	3	Check Re: Onset / Change	1	2	3
Hoarding or rummaging behavior not apparent	—	—	—	0	• New symptom within last 3 months	—	—
• Hoards food or objects picked up in environment but does not search others belongings	—	—	—	1	• Deterioration from previous status	—	—
• Searches others belongings looking for food or objects	—	—	—	2	Chronic but stable over time	—	—
Comment:	1						
Intervention:	2						
	3						

2C8 WANDERING

	1	2	3	Check Re: Onset / Change	1	2	3
Wandering behavior not apparent	—	—	—	0	• New symptom within last 3 months	—	—
Wanders, does not attempt to leave; able to orient self in environment without assistance	—	—	—	1	• Deterioration from previous status	—	—
• Wanders, does not attempt to leave; unable to orient self in environment without assistance	—	—	—	2	Chronic but stable over time	—	—
• Wanders, will leave immediate environment if not prevented; unable to orient self without assistance	—	—	—	3		—	—
Comment:	1						
Intervention:	2						
	3						

2C9 INDISCRIMINANT INGESTION OF FOREIGN SUBSTANCES

	1	2	3	Check Re: Onset / Change	1	2	3
Indiscriminant ingestion of foreign substances not apparent	—	—	—	0	• New symptom within last 3 months	—	—
• Occasionally ingests foreign substances	—	—	—	1	• Deterioration from previous status	—	—
• Ingests foreign substances and/or objects daily	—	—	—	2	Chronic but stable over time	—	—
Comment:	1						
Intervention:	2						
	3						

■ Further Evaluation Recommended

2C10 SUBSTANCE ABUSE

	1	2	3	Check Re: Onset / Change	1	2	3
Misuse/Abuse not apparent	1	2	3	0	1	2	3
Appropriate or no use of alcohol or drugs; does not impair ability to function	1	2	3	1	1	2	3
• Infrequent excess drinking or drug use; does not impair day to day functioning	1	2	3	2	1	2	3
• Frequent excess drinking or intoxication, occasional "black-outs" relationships and/or functioning affected	1	2	3	3	1	2	3
• Alcohol or drug dependent; frequent "black-outs"; unable to function in daily activities	1	2	3	4	1	2	3
• Functioning impaired; use of alcohol/drugs unconfirmed	1	2	3	5	1	2	3
Comment:							
Intervention:							

2C11 SMOKING BEHAVIOR

	1	2	3
Does not smoke, or has appropriate smoking habits	1	2	3
Requires supervision while smoking	1	2	3
• Fire hazard due to smoking habits	1	2	3
Comment:			
Intervention:			

2C12 SEXUALITY

	1	2	3
Appears comfortable with own sexuality and sexual expression, symptoms of inappropriate sexual behavior not apparent	1	2	3
• Expresses concern or discomfort with own sexuality	1	2	3
• Others express concern/discomfort with applicant's manner of sexual expression	1	2	3
Comment:			
Intervention:			

2C13 SOCIAL INTERACTION / LEISURE

	Social Interaction			Leisure		
	1	2	3	1	2	3
Participation in activities to applicant's own satisfaction	1	2	3	1	2	3
Limited participation due to confinement, disability, socially unacceptable behavior	1	2	3	1	2	3
• Unable to participate	1	2	3	1	2	3
Comment:						
Intervention:						

2C14 VALUES / BELIEFS / SPIRITUALITY

	1	2	3
Appears clear and comfortable with own values/beliefs/spirituality	1	2	3
• Experiencing struggle or conflict	1	2	3
• Experiencing distress or disturbances	1	2	3
Comment:			
Intervention:			

2C15 MANAGEMENT OF ALTERATIONS IN MENTAL & PSYCHOSOCIAL STATUS

NOTE TO ASSESSOR: Management of Alterations in Mental and Psychosocial Status takes into account the applicant's present mental and psychosocial status and identifies the overall interventions required.

1. Ineffective Coping

Ineffective coping refers to the applicant's ability or lack of ability to deal with emotional and physical stress. Review such items as depression, anxiety, suspicion, agitation, etc.

	1	2	3	4	5
No intervention required					
Intervention required, but less frequently than once a week					
Intervention required and more frequently than once a week, but less than every day					
Intervention required lasting less than 30 minutes in a 24 hour period					
Intervention required lasting 30 minutes or up to two hours in a 24 hour period					
Intense (one to one) intervention required lasting two hours or more in a 24 hour period					

Comment: _____

2. Potential For Injury To Self And Others

Potential for injury to self and others includes all factors that place the applicant at risk for psychosocial or physical injury to self or others. Review such items as memory, suicidal risk, wandering, aggressiveness, etc.

	Self			Others		
	1	2	3	1	2	3
No intervention required						
General observation required less frequently than once every 24 hours, but at least twice a week						
General observation and/or intermittent intervention required at least once every 24 hours						
General observation and/or intermittent intervention required at least two times in each 24 hour period						
General observation and intermittent intervention required more than two times a day, but less frequently than every hour						
Close observation and intermittent intervention required hourly or more often, but less than every 15 minutes						
Close and constant intervention required every 15 minutes or more often						

Comment: _____

2D ENVIRONMENTAL AND ACCOMMODATION APPRAISAL

1. Was on site evaluation conducted?

Yes No If no, give reason

1	☐	☐	☐	_____
2	☐	☐	☐	_____
3	☐	☐	☐	_____

2. Are there observable problems with the applicant's current or anticipated living environment?

	1		2		3			4		5		6	
	Y	N	Y	N	Y	N		Y	N	Y	N	Y	N
Type and amount of living space	☐	☐	☐	☐	☐	☐	Floor Surfaces	☐	☐	☐	☐	☐	☐
Accessibility to room	☐	☐	☐	☐	☐	☐	Stairs	☐	☐	☐	☐	☐	☐
Kitchen	☐	☐	☐	☐	☐	☐	Telephone	☐	☐	☐	☐	☐	☐
Bathroom	☐	☐	☐	☐	☐	☐	Heating	☐	☐	☐	☐	☐	☐
Laundry	☐	☐	☐	☐	☐	☐	Hot Water	☐	☐	☐	☐	☐	☐
Outside	☐	☐	☐	☐	☐	☐	Lighting	☐	☐	☐	☐	☐	☐
Other _____	☐	☐	☐	☐	☐	☐	Plumbing	☐	☐	☐	☐	☐	☐
							Smoke Detector	☐	☐	☐	☐	☐	☐

3. Describe Environment/Accommodation. Note suitability and modifications required to increase the level of independence and safety of the applicant.

2E SOCIAL HISTORY

Note to Assessor: Comment on where born, places lived, family history and family members, education, occupation, organizations and activities involved in, personal likes and dislikes, habits, etc.

Supplemental Form "D" available if additional space required

PART THREE**CARE PROVIDERS**

Check if no change ☐ 2 ☐ 3 Use Supplement Form "E" if additional space required or to note changes.

3A. INFORMAL CARE PROVIDERS

is a caregiver required?	☒ Y ☐ N
is a caregiver available?	☐ ☐ If No, State Reason _____
Will applicant accept help from informal caregivers?	☐ ☐ If No, State Reason _____
1. PRIMARY CAREGIVER	SPECIFY CARE/ACTIVITIES PROVIDED
NAME _____	
ADDRESS _____	
POSTAL CODE _____	
RES. PHONE _____ BUS. PHONE _____	
RELATIONSHIP _____	
Comment on present ability to provide care. Describe caregiver in terms of availability, motivation, physical and emotional capacity. Note limitations.	
2. OTHER CAREGIVER	SPECIFY CARE/ACTIVITIES PROVIDED
NAME _____	
ADDRESS _____	
POSTAL CODE _____	
RES. PHONE _____ BUS. PHONE _____	
RELATIONSHIP _____	
Comment on present ability to provide care. Describe caregiver in terms of availability, motivation, physical and emotional capacity. Note limitations.	
Family/Network Functioning: Comment on family dynamics, relationships and stresses which might affect whether or not the applicant can be cared for safely in the community.	
Check if: ☐ Y ☐ N ☐ Y ☐ N - At risk for institutionalization if caregiver unavailable ☐ ☐ - Need for respite/review services ☐ ☐	

NAME _____

3B. FORMAL CARE PROVIDERS**3B1. COMMUNITY BASED SERVICES**Check if none 1 ☐ 2 ☐ 3 ☐

List all community-based or outpatient services received by this applicant within the past twelve (12) months. Include service provided by agencies and individual health or social practitioners, including volunteers if they are affiliated with the provider agency. Do not include family members or neighbours who perform service(s) for the applicant.

AGENCY AND SERVICE(S) PROVIDED

CONTACT

Frequency of visits to doctor: _____

Comments: 1 _____

2 _____

3 _____

3B2. INSTITUTIONAL BASED SERVICESCheck if none 1 ☐ 2 ☐ 3 ☐

List all institutional care received within the past 12 months. Note frequency and reasons for accessing these services.

LTC Facility: _____

General Hospital: _____

Mental Health Facility: _____

Emergency: _____

Other: _____

Comments: 1 _____

2 _____

3 _____

PART FOUR ASSESSMENT SUMMARIES

ASSESSMENT 1C 2C 3C

Use Supplement F to note changes

		CODE KEYS																		
		Y = Yes N = No NK = Not Known P = Primary NR = Not Required																		
		Is there an alteration/needs? Is improvement anticipated? Is referral for further evaluation required? Can applicant meet needs? Can informal support meet needs? Can needs be met by home care program?																		
Page		Y	N	Y	N	NK	Y	N	NK	Y	P	N	Y	P	N	Y	P	N	NR	COMMENT
4A. PHYSICAL STATUS SUMMARY																				
Medications	4																			
Vision	5																			
Hearing	5																			
Express Comm.	5																			
Receptive Lang.	5																			
Dentition	6																			
Oral Hygiene	6																			
Diet	6																			
Hydration	6																			
Tissue/Skin Mgmt	6																			
Urinary Mgmt	7																			
Bowel Mgmt	7																			
Pain Mgmt	7																			
Sleep	7																			
Respiration	8																			
Circulation	8																			
Physical Function	9																			
Eating	10																			
Dressing	10																			
Grooming	10																			
Bathing	10																			
Toileting	10																			
Hand Care	10																			
Foot Care	10																			
Indoor Mobility	10																			
Outdoor Mobility	10																			
Stairs/Ramps	10																			
Transferring	10																			
Transportation	10																			

N/A

		Is there an identified strength?	Is referral for further evaluation indicated?	Is improvement anticipated?	Can applicant meet requirements?	Can normal support meet needs?	Can needs be met by home care program?	CODE KEYS Y = Yes N = No NK = Not Known P = Partially NR = Not Required	COMMENT										
Page	Y	N	Y	N	NK	Y	N	NK	Y	P	N	Y	P	N	Y	P	N	NR	
Shooting	11																		
Banking/Money	11																		
Fill in Forms	11																		
Meal Preparation	11																		
House Cleaning	11																		
Repairs/Yard	11																		
4B MENTAL STATUS SUMMARY																			
Awareness	12																		
Orientation	12																		
Memory	12																		
Judgement/Decision	12																		
4C PSYCHOSOCIAL STATUS SUMMARY																			
Anxiety	13																		
Depression	13																		
Suicide	13																		
Suspiciousness	13																		
Irritation	14																		
Aggression	14																		
Hoarding	14																		
Wandering	14																		
Indec. Ingestion	14																		
Substance Abuse	15																		
Smoking	15																		
Sexuality	15																		
Social Leisure	15																		
Values/Beliefs	15																		
Ineffective Coping	16																		
Potential Injury	16																		
4D ENVIRONMENTAL AND ACCOMMODATION SUMMARY																			
Environmental	17																		

4E SAFETY RISKS SUMMARY

	Yes	No	Comments:
Operation of Automobile	☐	☐	
Smoking Behaviour	☐	☐	
Use of Oven or Stove	☐	☐	
Admin. of Medication	☐	☐	
Substance Abuse	☐	☐	
Falls	☐	☐	
Wandering	☐	☐	
Other	☐	☐	

4F ATTITUDE TOWARDS CARE AND/OR TREATMENT

Comment on applicant's knowledge, skills and ability to follow through on treatments, seek information and help in relation to his/her health problems.

4G SERVICE SUMMARY

Is service or treatment required?

	Yes	No	Comments:
Nursing	☐	☐	
Physiotherapy	☐	☐	
Occupational Therapy	☐	☐	
Respiratory Therapy	☐	☐	
Social Worker	☐	☐	
Personal Care	☐	☐	
House Cleaning	☐	☐	
Meals	☐	☐	

Record other services below (i.e. speech therapy, nutritionist, recreation, transportation, handymen, counselling, day support, day hospital)

	☐	☐	
	☐	☐	
	☐	☐	

4H EQUIPMENT

Mark appropriate box if additional equipment or modifications to environment are required. Specify below.

EQUIPMENT

Yes	No
☐	☐

MODIFICATIONS

Yes	No
☐	☐

PART FIVE**PLACEMENT RECOMMENDATIONS**

After reviewing the summaries and service needs of the applicant, complete the following for a Placement Recommendation.

NAME _____

5A

Applicant needs household services but is in good health, does not require personal care or therapeutic health services.

1 2 3
 YES ☐ Non L.T.C. If NO ☐ cont. YES ☐ Non L.T.C. If NO ☐ cont. YES ☐ Non L.T.C. If NO ☐ cont.

▼

5B

Applicant has a medical condition requiring therapeutic health services and/or support services. However, these can be provided by the applicant, his/her informal support system, or other services.

1 2 3
 YES ☐ Non L.T.C. If NO ☐ cont. YES ☐ Non L.T.C. If NO ☐ cont. YES ☐ Non L.T.C. If NO ☐ cont.

▼

5C

Applicant has a medical condition requiring acute medical treatment, psychiatric intervention or intensive rehabilitation. Refer to a physician or referring agency for further evaluation.

1 2 3
 YES ☐ Non L.T.C. If NO ☐ cont. YES ☐ Non L.T.C. If NO ☐ cont. YES ☐ Non L.T.C. If NO ☐ cont.

▼

5D

Applicant's service requirements can be met through the Coordinated Home Care Program (CHCP). Services required are within the scope of the local CHCP. Review applicant's usual place of residence; consider if a change of residence is required (i.e. Lodge, Senior's Apartment Complex).

1 2 3
 YES ☐ Community L.T.C. If NO ☐ cont. YES ☐ Community L.T.C. If NO ☐ cont. YES ☐ Community L.T.C. If NO ☐ cont.

▼

5E

Applicant's service requirements indicate placement in a Long Term Care Facility should be considered. The Medical Assessment form is required from the applicant's physician and the L.T.C. Facility Admission Data form (Statement of Residency) must be completed. Refer to L.T.C. Facility Placement Committee for a decision re: Placement.

1 2 3
 YES ☐ Facility L.T.C. YES ☐ Facility L.T.C. YES ☐ Facility L.T.C.

PART SIX PLACEMENT SUMMARY

ASSESSMENT DATES

1 2 3 **6A. PLACEMENT OPTIONS**

Check one Placement for each of the following:

- ☐ Lodge or other residential placement only
- ☐ Non Long Term Care, household services only
- ☐ Non Long Term Care, informal support only
- ☐ Refer to physician for acute care hospital
- ☐ Refer to active rehabilitation facility
- ☐ Refer to Mental Health Facility
- ☐ CHCP at applicant's usual place of residence
- ☐ CHCP and a change in applicant's residence
- ☐ Long Term Care Facility

Applicant Preference			Primary Caregiver Preference			Assessor Preference			Placement Recommendation			Actual Placement		
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3

Is INTERIM PLACEMENT required? Yes ☐ No ☐

If YES, specify _____

6B. PLACEMENT RATIONALE

Is the Placement Recommendation different from the actual placement?

If yes, indicate the reason(s) for difference (check all that apply):

- Services not available in applicant's community ☐
- Limited Home Care funds ☐
- Applicant does not meet current Home Care eligibility criteria ☐
- Applicant's preference is different from the Placement Recommendation ☐
- Family, Primary C.G., Guardian preference is different from the Placement Recommendation ☐
- Additional services can be made available within current setting ☐
- Institutional bed not available: Applicant placed on Waiting List ☐
- Applicant has an immediate need for personal and/or therapeutic services which cannot be provided by either the applicant's family or the L.T.C. system ☐
- Placement authorization denied by Physician ☐
- Other ☐

1		2		3	
Y	N	Y	N	Y	N
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
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☐	☐	☐	☐	☐	☐

Comments: _____

6C PERSONS NOTIFIED OF ACTION TAKEN

ASSESSMENT 1		ASSESSMENT 2		ASSESSMENT 3	
Applicant					
DATE	BY WHOM	DATE	BY WHOM	DATE	BY WHOM
Family/Guardian					
DATE	BY WHOM	DATE	BY WHOM	DATE	BY WHOM
Physician					
DATE	BY WHOM	DATE	BY WHOM	DATE	BY WHOM
Other					
DATE	BY WHOM	DATE	BY WHOM	DATE	BY WHOM
Other					
DATE	BY WHOM	DATE	BY WHOM	DATE	BY WHOM

6D L.T.C. FACILITY PLACEMENT COMMITTEE APPROVED REFERRAL/ADMISSION TO

1	Coordinated Home Care Program	Name	
	Long Term Care Facility	Name	
	Other		
	Signature Chairperson/L.T.C. Facility Placement Committee	Date	
2	Coordinated Home Care Program	Name	
	Long Term Care Facility	Name	
	Other		
	Signature Chairperson/L.T.C. Facility Placement Committee	Date	
3	Coordinated Home Care Program	Name	
	Long Term Care Facility	Name	
	Other		
	Signature Chairperson/L.T.C. Facility Placement Committee	Date	

If the actual placement is a Long Term Care Facility, will the applicant require transportation to the Facility?

	1	2	3
Y	N	Y	N

6E REFERRAL

After determining the Placement Recommendation, is a referral being made?

1. No ☐ Yes ☐ Specify _____

2. No ☐ Yes ☐ Specify _____

3. No ☐ Yes ☐ Specify _____

RECORD OF ASSESSMENT

1 	- PRIMARY ASSESSOR _____ - ADDITIONAL ASSESSOR _____ - ADDITIONAL ASSESSOR _____ - ADDITIONAL ASSESSOR _____	NUMBER _____ _____ _____ _____	PROF. DESIGNATION _____ _____ _____ _____	SIGNATURE _____ _____ _____ _____
---	---	---	--	--

CHECK ATTACHMENTS

- ☐ A - Inst. Admin.
☐ D - Soc. Hist.
☐ Medical Assess.
☐ Other: _____

NOTES: _____

2 	- PRIMARY ASSESSOR _____ - ADDITIONAL ASSESSOR _____ - ADDITIONAL ASSESSOR _____ - ADDITIONAL ASSESSOR _____	NUMBER _____ _____ _____ _____	PROF. DESIGNATION _____ _____ _____ _____	SIGNATURE _____ _____ _____ _____
---	---	---	--	--

CHECK ATTACHMENTS

- ☐ A - Inst. Admin.
☐ B - Reg. for Ser.
☐ C - Medication
☐ D - Soc. Hist.
☐ E - Care Prov.
☐ F - Asses. Sum.
☐ Medical Assess.
☐ Other: _____

NOTES: _____

3 	- PRIMARY ASSESSOR _____ - ADDITIONAL ASSESSOR _____ - ADDITIONAL ASSESSOR _____ - ADDITIONAL ASSESSOR _____	NUMBER _____ _____ _____ _____	PROF. DESIGNATION _____ _____ _____ _____	SIGNATURE _____ _____ _____ _____
---	---	---	--	--

CHECK ATTACHMENTS

- ☐ A - Inst. Admin.
☐ B - Reg. for Ser.
☐ C - Medication
☐ D - Soc. Hist.
☐ E - Care Prov.
☐ F - Asses. Sum.
☐ Medical Assess.
☐ Other: _____

NOTES: _____

APPENDIX D

Alberta Home Care Program Non-admission Codes

Each case that is not admitted to home care is labelled with an alphabetic code A to J in order to document the reason for non-admission. These codes are:

- A - Not registered with Alberta Health Care Insurance Policy (AHCIP). (e.g.: a person who has come another province or country and has not yet registered for AHCIP.)
- B - Lives outside the program service area. (e.g.: a person who is assessed within an acute hospital by a home care case coordinator but is transferred to a health unit that is outside the Edmonton region.)
- C - Since the mandate change (1991) to waive the age criterion, this code is no longer used. Before 1991, an individual had to be over the age of 65 in order to be admitted to home care for support services. This code was used to indicate that an individual did not meet the age criterion. Since 1991, the criterion has been waived and this code is no longer used.
- D - Individual and family can manage care. (e.g.: the family was approached and agreed to provide the care.)
- E - Requires a type of service not provided by home care. (e.g.: requires a professional service not available in that health unit or a support service that is not provided by home care, such as gardening and yardwork.)

- F - Requires care beyond the home care mandate. (e.g.: the client needs 24 hour nursing and this is not mandated for home care.)
- G - Physical environment is not suitable for care. (e.g.: the building has been condemned unsafe for living.)
- H - Individual refused service. (e.g.: upon full information of the services that could be provided, the individual decided to refuse home care services.)
- I - Home care has insufficient resources. (e.g.: a cutback in services due to insufficient funds for the remainder of that fiscal year.)
- J - Other. (e.g.: death after assessment, or reason other than any of the above.)

APPENDIX E

SAMPLE SIZE CALCULATION

Power test

At an alpha level of .05 and a study power of .80, given 23 independent variables,
 $L = 22.12$

$$F^2 = \frac{R^2}{1 - R^2} = \frac{.2}{.8} = .25$$

Where k equals the number of independent variables and n is the number of subjects required:

$$n = \frac{L}{F^2} + k + 1 = \frac{22.12}{.25} + 23 + 1 = 112.48$$

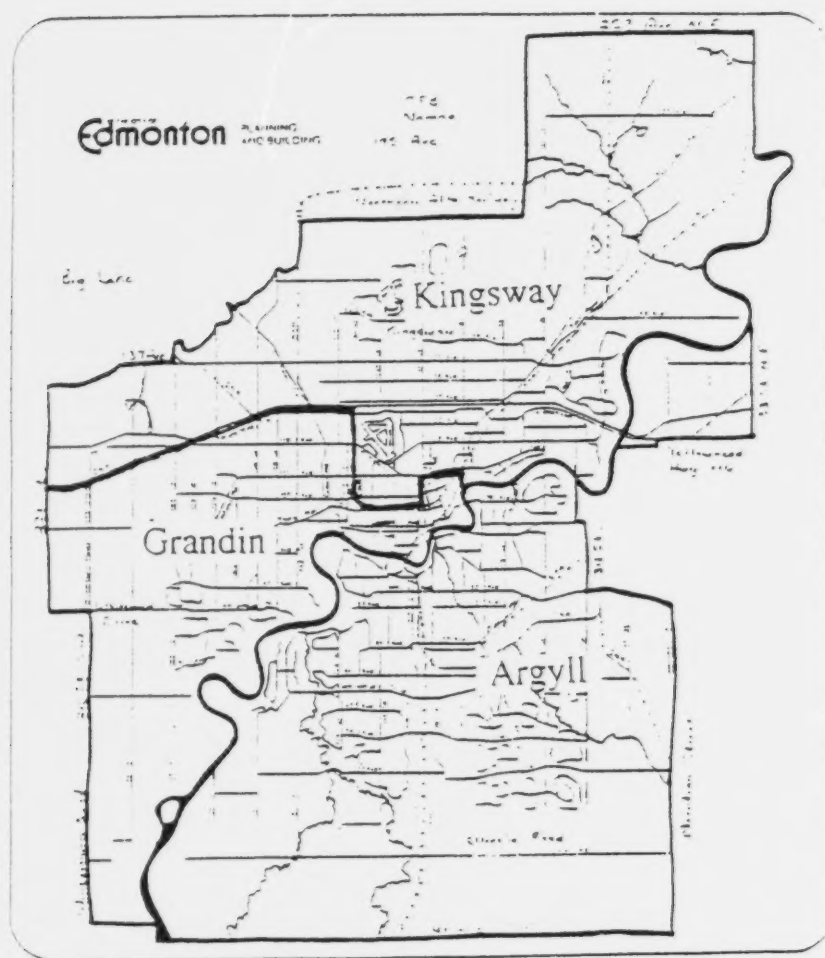
Therefore, in order to find .2 variance at an alpha level of .05 with a study power of .80, approximately 112 subjects will be needed.

To have an equal number per office per group, 120 subjects will be taken; 20 per each office per group.

Cohen, J. (1977). Statistical power analysis for the behavioral sciences. NY: Academic Press.

APPENDIX F

EBH-HCP MAP OF BOUNDARIES



APPENDIX G

PUBLIC HEALTH ACT: PROVINCIAL HOME CARE CRITERIA

Provincial criteria set forth in the Home Care Act are that:

- the person's home must be suitable for the provision of the service;
- the home care program is the most suitable method of providing the amount, level and type of any health care service or support services required by the person;
- the resources and the budget of the program must be monitored to be sufficient to meet the assessed needs of the person and the cost of providing health care or support services to an individual must not exceed \$3000 per month (with two exceptions to the rule of the \$3000 monthly limit are if the person is awaiting placement to a health care facility, or the provision of additional health and support services may avoid institutional placement and the period for which the additional services are required did not exceed three months in a calendar year);
- the individual must not require the services of a health care professional 24 hours a day on a continuing basis;
- the person must be a resident of Alberta as defined in the Alberta Health Care Insurance Act (Province of Alberta, 1991);
- the individual is registered with Alberta Health Care Insurance (Alberta Health, 1992b).

APPENDIX H

RESEARCH AND ETHICS COMMITTEE APPROVAL



EDMONTON
BOARD OF
HEALTH

Suite 500, 10216 - 124 Street
Edmonton, Alberta T5N 4A3

Phone: (403) 482-1965

Fax: (403) 482-4194

1994 04 29

Linda Lazaruk
Kingsway Home Care Office
#100, 11738 Kingsway Avenue
Edmonton, Alberta
T5G 0X5

Dear Ms Lazaruk:

Thank you for submitting your proposal titled, "Validity of the Alberta Assessment and Placement Instrument (AAPI) for use with Long Term Care Home Care Clients" and for meeting with the Research and Ethics Review Committee to discuss the study. I am pleased to report that the Committee approved participation of the Edmonton Board of Health in the study. Dr. Gerry Predy will send a letter to the clinic Supervisors indicating support for the project and asking them to facilitate your data collection.

We wish you success with your study and look forward to receiving a copy of the final report.

Sincerely,

for / Joy Edwards, Chairman
Research and Ethics Review Committee



Suite 500, 10216 - 124 Street
Edmonton, Alberta T5N 4A3

Phone: (403) 482-1965

Fax: (403) 482-4194

RESEARCH AND ETHICS REVIEW COMMITTEE

ETHICS APPROVAL FORM FOR RESEARCH INVOLVING HUMAN SUBJECTS

Date: 1994 04 29

Name(s) of Principal Investigator(s): Ms. Linda Lazaruk

Project Title: Validity of the Alberta Assessment and Placement Instrument (AAPI) for use
with Elderly Long Term Care Clients in Home Care.

The Research and Ethics Review Committee has reviewed the protocols involved in this project
and has found them to be acceptable on methodological and ethical grounds for research involving
human subjects.

Specific Comments:

Signed - Chairman of Research and Ethics Review Committee

Penny Macdonald / for
Joy Edwards

for the Edmonton Board of Health